State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	02/07/2013	
API #:	47-033-03929	F

nn name: HWV Incorporated	Operator Well	l No.: Ryan 2			
CATION: Elevation: 1186 GL	_ Quadrangle: _	Rosemont			
District: Simpson Latitude: 12,110 Feet South of 39 Deg. Longitude 10,920 Feet West of 80 Deg		00Sec		·······	
Company: Petroleum Development Corporation		·			
Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Bridgeport, WV 26330	11 3/4"	22'	22'	Sanded In	
Agent: Bob Williamson	8 5/8"	970'	970'	353	
Inspector: Tristan Jenkins	4 1/2"	2432'	2432'	485	
Date Permit Issued: 06/19/2008					
Date Well Work Commenced: 08/15/2008					
Date Well Work Completed: 08/18/2008					
Verbal Plugging:			FD 70.0		
Date Permission granted on:			MEC	EIVED	
Rotary Cable Rig V			Unice of	Oll & Gas	: 4
Total Vertical Depth (ft): 4231'			FFR 2	8 2013	
Total Measured Depth (ft): 4231'			•	0 2010	
Fresh Water Depth (ft.): 9', 206'			W Depa	rtment of	
Salt Water Depth (ft.): None		Er	Vironment	al Protectio	n
Is coal being mined in area (N/Y)? N					
Coal Depths (ft.): 69-73', 206-211'					
Void(s) encountered (N/Y) Depth(s) N					
OPEN FLOW DATA (If more than two producing formation	zone depth (ft)_ flowBbwBbBb	1729 bl/d bl/d	ata on separate sł	ncet)	• •
Second producing formationPay zo Gas: Initial open flowMCF/d Oil: Initial open					
Final open flowMCF/d Final open flo					
Time of open flow between initial and final tests					
Static rock Pressurepsig (surface pressure) a	ifterHou	rs			
ertify under penalty of law that I have personally examined the attachments and that, based on my inquiry of those ind at the information is true, accurate, and complete.					
Rilland			10710042		
Signature			07/2013 Date		

Were core samples taken? YesNo_XX	Were cuttings caught during drilling? Yes_	No_XX
Were Electrical, Mechanical or Geophysical logs recorded on		
		····
NOTE: IN THE AREA BELOW PUT THE FOLL FRACTURING OR STIMULATING, PHYSICAL CHANDETAILED GEOLOGICAL RECORD OF THE TOP COAL ENCOUNTERED BY THE WELLBORE FROM	IGE, ETC. 2). THE WELL LOG WHICH IS A S AND BOTTOMS OF ALL FORMATION	A SYSTEMATIC
Perforated Intervals, Fracturing, or Stimulating:	Tools retrievable plus @ 1900' Pressure	tosted easing
08/15/2008: MIRU BJ Services and Superior. Set BJ to 3475 psig. Perforated the 50 FOOT formation: 16 (······································
MIRU. Broke the 50 FOOT formation. Formation broke at 16		
40,000 lbs of 30/50 Sand, 27.9 bbl of flush. Stage sand at 1# p		
Shut down, ISIP - 1362 psi, 5 min SIP - 1110 psi.		
Plug Back Details Including Plug Type and Depth(s):		
	Depth / Botto	om Depth
Surface:		
O MACH Lauffern advised completion of this was	II (47 022 02020)	
See "Well Log" from original completion of this we	11 (47-055-05828).	

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	02/05/2013	
API#:	47-033-05139	_

Farm name:Fahey, William F.	_ Operator Wel	l No.: Fahey 5			
LOCATION: Elevation: 1296' GL	_ Quadrangle: _	Wolf Summit 7.5	j		
District: Tenmile	County: Har	rrison			
Latitude: 11,970 Feet South of 39 Deg	22 Min	Scc			
Longitude 11,790 Feet West of 80 Deg	gMin	Sec	•		,
Company: Petroleum Development Corporation					
Address: Petroleum Development Corporation 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Bridgeport, WV 26330	13 3/8"	19'	19'	Sanded In	
Agent: Bob Williamson	9 5/8"	253'	253'	162	İ
Inspector: Tristan Jenkins	7"	1737'	1737'	354	
Date Permit Issued: 08/27/2008	4 1/2"	5303'	5303'	423	
Date Well Work Commenced: 10/29/2008					
Date Well Work Completed: 11/13/2008					
Verbal Plugging:			EIVED	-	
Date Permission granted on:		MEC	Oil & Ga	s	
Rotary V Cable Rig					Î
Total Vertical Depth (ft): 5542'		FEB	28 2013		
Total Measured Depth (ft): 5542'				a.	
Fresh Water Depth (ft.): 410'		WV De	bartment	otion	
Salt Water Depth (ft.): 1650', 1834'	E	MA DE	Mai Prote	!(;[() 	
Is coal being mined in area (N/Y)? N					
Coal Depths (ft.): 475'					
Void(s) encountered (N/Y) Depth(s) N					
			·!		,
OPEN FLOW DATA (If more than two producing formation Benson, 5th & 4th Sands Page 1997)	tions please inch y zone depth (ft)		ata on separate	sheet)	•
Gas: Initial open flow 84 MCF/d Oil: Initial open		Bbl/d		•	.
Final open flow 189 MCF/d Final open flo		bl/d			
Time of open flow between initial and final tests	24 Hour	s		r.	•
Static rock Pressure 280 psig (surface pressure)	after <u>72</u> Hou	ns			
Second producing formation Gordon (commingled) Pay z	one denth (ft) 28	05			
Gas: Initial open flowMCF/d Oil: Initial open		Bbl/d			
Final open flow MCF/d Final open flo		bl/d			
Time of open flow between initial and final tests		s			
Static rock Pressurepsig (surface pressure)	afterHou	nrs			
certify under penalty of law that I have personally examined	d and am familia	r with the infor	nation submitte	d on this documen	ıt and
If the attachments and that, based on my inquiry of those inc	dividuals immed	iately responsib	le for obtaining	the information I t	oefiev
hat the information is true, accurate, and complete.					
		กวม	07/2013		
Signature			Date		

Were core samples taken?	YesNo_XX	Were cuttings caught	during drilling?	YesNo_XX
Were Electrical, Mechanica	l or Geophysical logs recorded	on this well? If yes, please lis	t Weatherford Photo	Density/Comp Neutron/
Array Induction from 5542-1728. Sup	perior GR/CCL/CBL /VDL from 5274 - 1600.			

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

11/13/2008:MIRU HES & Superior Wireline, ran GR/CCL/CBL from 5274'. Perf Benson w/12 holes from 5224'-30'. RU HES, test lines, & pump an N2 assist Delta 15# gel system. Formation broke at 3159#. Start 65 bbl pad, 331 bbls treating fluid, 29,800 lbs of 20/40 Sand, 70 bbl of flush. Stage sand at 1# ppg increments from 1# - 4# ppg. MTP - 2972 psi, ATP - 2826 psi. Shut down, ISIP - 2294 psi. 2nd stage: Perforated the 5th/4th Sand formation: 17 holes from (3022-40). Pumped an N2 assist Delta 15# gel system. Formation broke at 2870#. Start 110 bbl pad, 481 bbls treating fluid, 49,900 lbs of 20/40 Sand, 51 bbl of flush. Stage sand at 1# ppg increments from 1# - 4# ppg. MTP - 3136 psi, ATP - 2983 psi. Shut down, ISIP - 2508 psi. Perf Gordon w/12 holes from 2805'-11'. Pumped an N2 assist Delta Plug Back Details Including Plug Type and Depth(s): 15# gel system. Formation broke at 2811#. Start 76 bbl pad, 463 bbls treating fluid, 39,900 lbs of 20/40 Sand, 45 bbl of flush. Stage sand at 1# ppg increments from 1# - 4# ppg. MTP - 3902psi, ATP - 3268 psi. Shut down, ISIP - 3524 psi.

Formations Encountered:	Top Depth	1	Bottom Depth
Surface:			
Little Lime	2160	2186	
Big Lime	2206	2250	
Keener	2257	2293	
Big Injun	2300	2344	
Gantz	2692	2717	
Fifty Foot	2778	2814	Show Gas
Gordon Stray	2890	2917	
4th SS	2950	2993	
5th SS	3007	3047	Show Gas
Speechley	3508	3940	
Balltown	4020	4228	
Bradford	4328	4474	
Riley	4778	5130	
Benson	5224	5266	Show Gas
TD	5542		

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	02/05/2013	
API #:	47-033-05140	

Farm name: Fahey, William F.	Operator Well	No.: Fahey 6		
LOCATION: Elevation: 1402 GL	Quadrangle: _	Wolf Summit 7.5		
District: Tenmile	County: Harr	ison		
Latitude: 12,010 Feet South of 39 Deg.	22 Min.	30 Sec		
Longitude 8,490 Feet West of 80 Deg.	27 Min.	30 Sec		
Company: Petroleum Development Corporation				
Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	13 3/8"	19'	19'	Sanded In
Agent: Bob Williamson	9 5/8"	253'	253'	100
Inspector: Tristan Jenkins	7"	1822'	1822'	375
Date Permit Issued: 08/27/2008	4 1/2"	5354'	5354'	460
Date Well Work Commenced: 11/05/2008				
Date Well Work Completed: 11/20/2008				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig			ECEIVED	
Total Vertical Depth (ft): 5610'		Onic	e of Oil &	383
Total Measured Depth (ft): 5610'		F	EB 28 2013	
Fresh Water Depth (ft.): 45', 115'			•	
Salt Water Depth (ft.): 1883'		WV	Departmen	nt of
Is coal being mined in area (N/Y)? N		Environ	mental Pro	rection
Coal Depths (ft.): 575'				
Void(s) encountered (N/Y) Depth(s) N				
OPEN FLOW DATA (If more than two producing formation Producing formation Benson, 5th & 4th Sands Pay zo Gas: Initial open flow 147 MCF/d Oil: Initial open flow Time of open flow between initial and final tests Static rock Pressure 560 psig (surface pressure) after Second producing formation Gordon (commingled) Pay zor Gas: Initial open flow MCF/d Oil: Initial open flow Time of open flow between initial and final tests	cone depth (ft) 5 OW Show Bb Show Bb Hours Ter 744 Hour The depth (ft) 293 OW Bb Bb	254,3009 0l/d l/d 'S 5 ol/d	ta on separate sh	eet)
Static rock Pressurepsig (surface pressure) aft	terHour	rs		

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

02/07/2013 Date

Were core samples taken? Yes	_No_XX We	re cuttings caught during dril	lling? Yes	No_XX
Were Electrical, Mechanical or Geophy Array Induction from 5610-1700. Superior GR/CCL/CI	sical logs recorded on this well? 3L NDL from 5306 - 1660.	If yes, please list Weatherfor	d Photo Density	/Comp Neutron/
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING DETAILED GEOLOGICAL RECO COAL ENCOUNTERED BY THE V	G, PHYSICAL CHANGE, ET ORD OF THE TOPS AND	C. 2). THE WELL LOG W BOTTOMS OF ALL FO	HICH IS A S	YSTEMATIC
Perforated Intervals, Fracturing, or Stin	nulating:			
1/20/2008:MIRU BJ Serv. & Superior Wireline, ran	GR/CCL/CBL from 5306', Perf Benson w	/4 holes from 5254'-56' & 9 holes fro	m 5259-62' RU B.	J, lest lines, & pump
an N2 assist Lightning gel system. Formation	n broke at 3086#. Slart 80 bbl pad,	173 bbls treating fluid, 35,000 lb	s of 30/50 Sand,	42 bbl of flush.
Stage sand at 1# ppg increments from	1# - 4# ppg. MTP – 3086 psi, /	ATP - 2605 psi. Shut down	ı, ISIP – 2033	psi. 2nd stage:
Perforated the 5th/4th Sand formation: 5 holes from 300	39-12, 5 holes from 3015-18, 10 holes from 3	3065-70. Pumped an N2 assist Lightnin	g gel system. Forma	tion broke at 3061#.
Start 74 bbl pad, 407 bbls treating fluid, 5	0,100 lbs of 30/50 Sand, 49 bbl o	of flush. Stage sand at 1# ppg	increments fro	om 1# - 4# ppg.
WTP - 3061 psi, ATP - 2777 psi. Shut d	own, ISIP - 2142 psi. Perf Gordo	n w/8 holes from 2935'-39'. P	umped an N2 a	assist Lightning
Plug Back Details Including Plug Type	and Depth(s): gel system. Form	ation broke at 3063#. Start 55	bbl pad, 279 bb	ols treating fluid,
25,0000 lbs of 30/50 Sand, 47 bbl of flush. Stage	sand at 1# ppg increments from 1# -	4# ppg. MTP - 3287psi, ATP - 306	63 psi. Shul dowr	n, ISIP – 2609 psi.
Formations Encountered: Surface:	Top Depth	I	Bottom	<u>Depth</u>
Maxton	2162	2193		
Big Lime	2222	2264		
Keener	2268	2313		
Big Injun	2316	2360		
Gantz	2694	2739		
Fifty Foot	2810	2846		
Gordon Stray	2922	2943		
4th SS	2985	3021	Show	Gas
5th SS	3036	3077	Show	Gas
Speechley	3510	3940		
Balltown	4044	4248		
Bradford	4320	4478		
Riley	4779	5145		
Benson	5251	5294	Show	Gas
TD	5610			

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	02/14/2013
API#:	47-041-04016 F

arm name: White, Bruce, Et Al	Operator Wel	I No.: B. White 1			
OCATION: Elevation: 1378 GL	_ Quadrangle: _	Berlin 7.5'			
District: Hackers Creek Latitude: 8,390 Feet South of 39 Deg. Longitude 4,290 Feet West of 80 Deg	County: Lewis07				
Company: PDC Mountaineer LLC					
Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Bridgeport, WV 26330	11 3/4"	30'	30'	Sanded In	
Agent: Bob Williamson	8 5/8"	1290'	1290'	392	
Inspector: Bill Hatfield	4 1/2"	4702'	4702'	710	
Date Permit Issued: 03/23/2009					
Date Well Work Commenced: 06/08/2009		1.			
Date Well Work Completed: 06/09/2009					
Verbal Plugging:					
Date Permission granted on:					
Rotary Cable Rig		RECE	WED		
Total Vertical Depth (ft): 4759'		Office of C			
Total Measured Depth (ft): 4759'					
Fresh Water Depth (ft.): 20', 75'		FEB 28	2013		
Salt Water Depth (ft.): 2025'		,			
Is coal being mined in area (N/Y)? N		WV Depar			
Coal Depths (ft.): 923' - 927'	ENV	ironment a	Protection		
Void(s) encountered (N/Y) Depth(s) N					
Void(s) encountered (N/Y) Depth(s) "		<u> L</u>			
Producing formation Bayard Pay Gas: Initial open flow MCF/d Oil: Initial open flow Time of open flow between initial and final tests Static rock Pressure 250 psig (surface pressure) a	zone depth (ft) flow Show B W Show BI Hours	2572, 2606 bl/d ol/d	ta on separate s	heet)	
Second producing formation_5lh Sand (commingled) Pay zo	one depth (ft) 25	12, 2530			
Gas: Initial open flowMCF/d Oil: Initial open flow					
Final open flow MCF/d Final open flow					
Time of open flow between initial and final tests			•		
certify under penalty of law that I have personally examined II the attachments and that, based on my inquiry of those indinat the information is true, accurate, and complete.	and am familia	r with the inforn	e for obtaining (
Signature	1		5/2013 Date		

Were core samples taken? YesNo_X	X Were	cuttings caught durin	g drilling? Yes	NoXX
Were Electrical, Mechanical or Geophysical logs		If yes, please list_Hotw	eil GR/CCL cased hole log	from 2800'-2350'.
NOTE: IN THE AREA BELOW PUT FRACTURING OR STIMULATING, PHYS DETAILED GEOLOGICAL RECORD OF COAL ENCOUNTERED BY THE WELLBO	SICAL CHANGE, ETC F THE TOPS AND B ORE FROM SURFACE	. 2). THE WELL LO OTTOMS OF ALL	OG WHICH IS A S FORMATIONS,	YSTEMATIC
Perforated Intervals, Fracturing, or Stimulating:				
06/09/2009: MIRU Weatherford & Hotwell Wireline. Log with	h GR/CCL & set solid compos	ite BP at 2650'. Perf the Ba	ayard with 8 holes from 2	604-09 & 8 holes
from 2571-75. RU Weatherford & frac the Bayard Breakdown 3091psig.	; Fluid 30Q Foam; N2 140,500 scl Tr	ealment: Pad 2184 gal, Sand La	den Fuid (Linear 15# Aquavis	System) 12,600 gal,
Sand 30,200# 20/40 White Sand, Flush 1848 gal (includes 12 bb	Acid). Pressures: ATP 2404 psi	g, MTP 3091 psig Rates: AV	G Rate 20.3 bbl/min, AVG	N2 Rate 5418 sc/m
ISIP: 1952 psig. Set flow-thru composite plug at 2549	' and perforate the Fifth Sar	nd with 8 holes from 252	26-33 & 8 holes from 2	511-15. Frac 5th
Sand: 5th Sand Breakdown 2412 psig; Fluid 30Q Foam; N2	2 132624 scf Trealment: Pad 2	184 gal, Sand Laden Fluid	(Linear 15# Aquavis Sy	stem) 13986 gal,
Sand 29,600# 20/40 White Sand, Flush 1512 gal. Pressures: A				• •
Plug Back Details Including Plug Type and Dep	th(s): Drilled out bot	th plugs & clean	ed out to origin	al TD.

Formations Encountered: Surface:	Top Depth	<u> </u>	Bottom	<u>Depth</u>
See original submitted Well Log for this	well API# 47-041-0	4016		
		RECEIVED		
	Off	ice of Oil & G	as	
		FEB 2 8 2013		
	W	/ Department	of	
	Enviro	nmantal Drate	ection	

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	02/14/2013		
API#:	47-041-04127	F	

Farm name: Schock, Nason A.	Operator Well	No.: Schock 1		
L()CATION: Elevation: 1267' GL	Quadrangle: _	Walkersville 7.5°		
District: Collins Settlement Latitude: 13,480 Feet South of 38 Deg. Longitude 3,630 Feet West of 80 Deg.		Sec.		
Company: PDC Mountaineer LLC				
Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	11 3/4"	21'	21'	Sanded In
Agent: Bob Williamson	8 5/8"	1014'	1014'	329
Inspector: Bill Hatfield	4 1/2"	4090'	4090'	757
Date Permit Issued: 04/30/2009				
Date Well Work Commenced: 09/30/2009				
Date Well Work Completed: 09/30/2009			-	
Verbal Plugging:				
Date Permission granted on:	<u> </u>	REC	EIVED	
Rotary Cable Rig V		Office o	Oil & Ga	3
Total Vertical Depth (ft): 4120'				
Total Measured Depth (ft): 4120'		FEB	2 8 2013 —	
				£
Fresh Water Depth (ft.): 27'		WV De	artment C	m mion
Salt Water Depth (ft.): None	- E	nvironme	ntel Prote	
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 224'-227'				
Void(s) encountered (N/Y) Depth(s) N	<u> </u>	L		
OPEN FLOW DATA (If more than two producing formation Producing formation Gantz Pay 7 Gas: Initial open flow 189 MCF/d Oil: Initial open flow NT MCF/d Final open flow Time of open flow between initial and final tests ——	zone depth (ft)_ lowBt vBb	1774 bl/d l/d	ta on separate sl	eet)
Static rock Pressure NT psig (surface pressure) af	terHou	rs		
Second producing formation Bayard (commingled) Pay zon				
Gas: Initial open flowMCF/d Oil: Initial open flowMCF/d Final open flow				
Final open flow MCF/d Final open flow Time of open flow between initial and final tests				
Static rock Pressurepsig (surface pressure) af				
I certify under penalty of law that I have personally examined			nation submitted	on this docume

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

2-14-2013 Date

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Holwell GR/CCL from 2400' - 1430' NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH. Perforated Intervals, Fracturing, or Stimulating: 2000.0000.0001 M600 July Services & Hobert Wealthe Log with GROCCL 8 set said cooperate DP at 210° Pert the Beyord with a bases from 2504-2200 PIU B. I & Stimulated with 30 quality N2 setted. 2000 acids. Remand and demonstration from 3-4 ppo in 107 Did. 61,600 slim @ 18 bpm, 2000 acids. Planted with 5 Bill spaces, 12 8th 150% INC. 62 bill of intended IP30 @ 18 bpm, 1200 acids. Planted with 5 Bill spaces, 12 8th 150% INC. 62 bill of intended IP30 @ 18 bpm, 1200 acids. Planted with 5 Bill spaces, 12 8th 150% INC. 62 bill of intended IP30 @ 18 bpm, 1200 acids. Planted with 5 Bill spaces, 12 8th 150% INC. 62 bill of intended IP30 @ 18 bpm, 1200 acids. Planted Services acids and 140000 acids. Planted IP30 @ 18 bpm, 1200 acids. Planted Services Planted Services acids. Planted Service	Were core samples taken? YesNo	XX Were cut	ttings caught during drillin	g? YesNo_XX
FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH. Perforated Intervals, Fracturing, or Stimulating: 1007/2017/2009: MIRU BJ Services & Howest Wireline. Log with GRICCL 8 set solid composite BP at 2310* Pert the Bayard with 8 holes from 2284-2290 RU BJ & Stimulated well with 30 quality N2 assist. 2007/2017/2009: MIRU BJ Services & Howest Wireline. Log with GRICCL 8 set solid composite BP at 2310* Pert the Bayard with 8 holes from 2284-2290 RU BJ & Stimulated well with 30 quality N2 assist. 2007/2017/2009: MIRU BJ Services & Howest Wireline. Log with GRICCL 8 set solid composite BP at 2310* Pert the Bayard with 8 holes from 2284-2290 RU BJ & Stimulated well with 30 quality N2 assist. 2007/2017/2009: MIRU BJ Services & Howest Wireline. Log with GRICCL 8 set set of 2009 set in 1300 perig. Pumped a pad of 68 bb. 15,000 set @ 18 bpm. 2800 set in. Remped seand concentrations from .5-4 ppa in 167 bbt. 5,000 set @ 18 bpm. 1000 set in. Remped seand send 145000 set AV (ATP 2217 page, MITP 2200 page) (Avg Rates 16 bpm; 5000 set in. Netd 34 send concentration for 31 bbt. 15,000 set @ 12 bpm, 5000 set in. Remped send concentrations from .5-3 ppa in 200 bbt, 75,000 set in. 20 12 bpm; 5000 set in. Netd 34 send concentration for 21 bbt, 6000 set @ 12 bpm, 5000 set in. Remped send concentrations from .5-3 ppa in 200 bbt, 75,000 set in. 20 12 bpm; 5000 set in. Netd 34 send concentration for 31 bbt. 15,000 set @ 12 bpm, 5000 set in. Flushed with 30 bbt of 1400 @ 13 bpm; 18P 1607 page 21 12 bpm; 5000 set in. Netd 34 send concentration for 31 bbt. 15,000 set @ 12 bpm; 5000 set in. Flushed with 30 bbt of 1400 @ 13 bpm; 18P 1607 page 21 12 bpm; 5000 set in. Netd 34 send concentration for 31 bbt. 15,000 set @ 12 bpm; 5000 set in. Flushed with 30 bbt of 1400 @ 13 bpm; 18P 1607 page 22 12 bpm; 5000 set in. Netd 34 send concentration for 31 bbt. 15,00			es, please list Hotwell GR	/CCL from 2400' - 1430'
20 080 De of 2040 white sand and \$6,000 scl N2 (ATP 1330 psig. MTP 1680 psig) (Avg Rates 18 bpm; 2600 sclm.) Brokedown formation at 1390 psig. Pumped a pad of 68 bbt, 16,000 scl @ 18 bpm. 2600 sclm. Remped sand concentrations from .5-4 pps in 167 bbt, 51,000 scl @ 16 bpm. 2600 sclm. Flushed with 5 bbt spacer, 12 bbt 15% HCl, 8 20 bbt of treated H20 @ 18 bpm. ISIP 1045 psig RU Hotwell 8 set a composite flow three lace plug at 1820. Perf the Gentz at 1773-1782. Stimulated bt 06 Gantz with 30 quality N2 assists, 30,687 lbs of 2040 white sand and 45000 scl N2 (ATP 2217 psig, MTP 2300 psig) (Avg Rates 16 bpm; 5000 sclm.) Brokedown formation at 2270 psig. Pumped a pad of 50 bbt, 21,000 scl @ 12 bpm, 5000 sclm. Ramped sand concentrations from .5-3 pps in 200 bbt, 75,000 sfm @ 18 bpm; 5000 sclm. Held 36 sand concentration for 21 bbt, 5000 scl @ 12 bpm, 5000 sclm. Ramped sand concentrations from .5-3 pps in 200 bbt, 75,000 sfm @ 18 bpm. School sclm. Held 48 sand concentration for 34 bbt. 16,000 scl @ 12 bpm, 5000 sclm. Flushed with 30 bbt of H20 @ 13 bpm. ISIP 1607 psig Plug Back Details Including Plug Type and Depth(s): Drilled out both plugs & cleaned to original TD. Formations Encountered: Top Depth / Bottom Depth Surface: See original submitted Well Log for this well API# 47-041-04127.	FRACTURING OR STIMULATING, P DETAILED GEOLOGICAL RECOR	PHYSICAL CHANGE, ETC. 2). D OF THE TOPS AND BOT	. THE WELL LOG WHI TOMS OF ALL FORM	ICH IS A SYSTEMATIC
20.090 lbs of 20/400 white send and 68,000 scf N2 (ATP 1330 psig, MTP 1660 psig) (Avg Rates 18 bpm; 2600 scfm. Ramped sand concentrations from .5-4 pps in 167 bbt, 51,000 sfm @ 18 bpm, 2600 scfm. Flushed with 5 bbt spacer, 12 bbt 15% HCl, 8 20 bbt of frested H2O @ 18 bpm. ISIP 1045 psig N2 Hotwett 6 set a composite flow thru tiese plug at 1820. Perf the Gantz at 1773-1782. Simulated the Gantz with 30 quetity N2 assist, 30,007 lbs of 20/40 white sand and 145000 scf N2 (ATP 2217 psig, MTP 2309 psig) (Avg Rates 16 bpm; 5000 scfm.) Brokedown formation at 2270 psig. Pumped a pad of 50 bbt, 21,000 scf @ 12 bpm, 5000 scfm. Ramped sand concentrations from .5-3 pps in 209 bbt, 75,000 sfm @ 12 bpm, 5000 scfm. Held 38 sand concentration for 21 bbt, 5000 scfm. Held 38 sand concentration for 21 bbt, 5000 scfm. Held 38 sand concentration for 21 bbt, 5000 scfm. Held 38 sand concentration for 21 bbt, 5000 scfm. Held 38 sand concentration for 21 bbt, 5000 scfm. Held 38 sand concentration for 21 bbt, 5000 scfm. Held 38 sand concentration for 21 bbt, 16,000 scf @ 12 bpm, 5000 scfm. Flushed with 30 bbt of H2O @ 13 bpm. ISIP 1607 psig Plug Back Details Including Plug Type and Depth(s): Drilled out both plugs & cleaned to original TD. Formations Encountered: Top Depth / Bottom Depth Surface: See original submitted Well Log for this well API# 47-041-04127.	Perforated Intervals, Fracturing, or Stimula	ting:		
2800 sc/m. Remped sand concentrations from .5-4 ppe in 167 bbl, 51,000 sc/m @ 18 bpm, 2800 sc/m. Flushed with 5 bbl spacer, 12 bbl 15% HCl, & 20 bbl of treated H2O @ 18 bpm. ISIP 1045 psig RU Hohweld & set a composite flow thru kee ptug at 1820. Pert the Gardz at 1773-1782.55mm/dated the Gardz with 30 quelity N2 assist, 30,087 bs of 2040 white sand and 145000 scf N2 (ATP 2217 psig, MTP 2309 psig) (Avg Rates 16 bpm; 5000 scfm). Brokedown formation at 2270 psig. Pumped a pad of 50 bbl, 21,000 scf @ 12 bpm, 5000 scfm. Remped sand concentrations from .5-3 ppa in 209 bbl, 75,000 scfm @ 12 bpm, 5000 scfm. Held 38 sand concentration for 21 bbl, 6000 scf @ 12 bpm, 5000 scfm. Held 38 sand concentration for 21 bbl, 6000 scf @ 12 bpm, 5000 scfm. Flushed with 30 bbl of H2O @ 13 bpm. ISIP 1607 psig Plug Back Details Including Plug Type and Depth(s): Drilled out both plugs & cleaned to original TD. Formations Encountered: Top Depth / Bottom Depth Surface: See original submitted Well Log for this well API# 47-041-04127.	09/30/2009: MIRU BJ Services & Hotwell Wireline. Log with GR/CC	CL & set solid composite BP at 2310'. Perf the Bayar	rd with 8 hales from 2284-2290.RU BJ &	Stimulated well with 30 quality N2 assist,
RU Holwell & set a composite flow thru (see plug at 1820'. Perf the Gentz at 1773-1782. Simulated the Gentz with 30 quelity N2 easts, 30.087 lbs of 20400 while sand and 145000 sct N2 (ATP 2217 psig. MTP 2309 psig) (Avg Rates 16 bpm; 5000 scfm). Brokedown formation at 2270 psig. Pumped a pad of 50 bbl, 21,000 scf @ 12 bpm, 5000 scfm. Ramped sand concentrations from .5-3 ppa in 209 bbl, 75,000 sfm @ 12 bpm, 5000 scfm. Held 38 sand concentration for 21 bbl, 6000 scf @ 12 bpm, 5000 scfm. Held 48 sand concentration for 34 bbl, 16,000 scf @ 12 bpm, 5000 scfm. Flushed with 30 bbl of H20 @ 13 bpm. SIP 1607 psig Plug Back Details Including Plug Type and Depth(s): Drilled out both plugs & cleaned to original TD. Formations Encountered: Top Depth / Bottom Depth Surface: See original submitted Well Log for this well API# 47-041-04127. FEB 28:2013	20,090 lbs of 20/40 white sand and 58,000 sci N2 (ATP 1330 psig.	MTP 1660 psig) (Avg Rates 18 bpm; 2600 scfm) B	rokedown formation at 1390 psig. Pumpi	ed a pad of 68 bbl, 16,000 scl @ 18 bpm,
(Avg Rates 16 bpm; 5000 scfm). Brokedown formation at 2270 psig. Pumped a pad of 50 bbl, 21,000 scf @ 12 bpm, 5000 scfm. Ramped sand concentrations from .5-3 ppa in 200 bbl, 75,000 sfm @ 12 bpm, 5000 scfm. Held 36 sand concentration for 21 bbl, 6000 scf @ 12 bpm, 5000 scfm. Held 36 sand concentration for 21 bbl, 6000 scf @ 12 bpm, 5000 scfm. Flushed with 30 bbl of H2O @ 13 bpm. ISIP 1607 psig Plug Back Details Including Plug Type and Depth(s): Drilled out both plugs & cleaned to original TD. Formations Encountered: Top Depth / Bottom Depth Surface: See original submitted Well Log for this well API# 47-041-04127.	2600 scfm. Ramped sand concentrations from .5-4 ppe in 167 bbl	, 51,000 sim @ 18 bpm, 2600 scim. Flushed vith 5	5 bbl spacer, 12 bbl 15% HCl, & 20 bbl o	of treated H2O @ 18 bpm. ISIP 1045 psig
Plug Back Details Including Plug Type and Depth(s): Drilled out both plugs & cleaned to original TD. Formations Encountered: Top Depth / Bottom Depth Surface: See original submitted Well Log for this well API# 47-041-04127. FEB 2 8 2013	RU Hotwell & set a composite flow thru frac plug at 1820'. Perf the Gentz	at 1773-1782. Stimulated the Gantz with 30 quality N2 as	isist, 30,087 lbs of 20/40 white sand and 145	5000 scf N2 (ATP 2217 psig, MTP 2309 psig)
Plug Back Details Including Plug Type and Depth(s): Drilled out both plugs & cleaned to original TD. Formations Encountered: Top Depth / Bottom Depth Surface: See original submitted Well Log for this well API# 47-041-04127. Office of Oii 3 Gas FEB 2 8 2013	(Avg Rates 16 bpm; 5000 scfm). Brokedown formation at 2270 ps	sig. Pumped a pad of 50 bbl, 21,000 scf @ 12 bpm,	, 5000 scim. Ramped sand concentratio	ns from .5-3 ppa in 209 bbl, 75,000 sfm
Formations Encountered: Top Depth / Bottom Depth Surface: See original submitted Well Log for this well API# 47-041-04127. Office of Oil 3 Gas FEB 2 8 2013				
Surface: See original submitted Well Log for this well API# 47-041-04127. PECEIVED Office of Oil 3 Gas FEB 2 8 2013	Plug Back Details Including Plug Type and	I Depth(s): Drilled out both p	plugs & cleaned to	original TD.
Surface: See original submitted Well Log for this well API# 47-041-04127. PECEIVED Office of Oil 3 Gas FEB 2 8 2013				
Surface: See original submitted Well Log for this well API# 47-041-04127. PECEIVED Office of Oil 3 Gas FEB 2 8 2013				
See original submitted Well Log for this well API# 47-041-04127. PECEIVED Office of Oii 3 Gas FEB 2 8 2013	Formations Encountered:	Top Depth		Bottom Depth
Office of Oil 3 Gas FEB 2 8 2013	Surface:			
Office of Oil 3 Gas FEB 2 8 2013				
FEB 2 8 2013	See original submitted Well Log for	this well API# 47-041-041:	27.	
FEB 2 8 2013				lea Co
FEB 2 8 2013			Office of Oil	
WV Department of Environmental Protection			FEB 28 20	113
Environmental Protection			MAIR	
anviolimental Protection			Environmental	ent of
			arranominental P	rotection
			Andrew Andrews	

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	02/14/2013
API#:	47-041-04153

OCATION: Elevation: 1263' GL	Quadrangle: _	Roanoke 7.5'		
District: Collins Settlement				
Latitude: 900 Feet South of 38 Deg.	County: Lewi			
Longitude 11,590 Feet West of 80 Deg.				
Company: PDC Mountaineer LLC				
120 Genesis Roulevard	Casing &	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: Bridgeport, WV 26330	Tubing 13 3/8"	27'	27'	Sanded In
Agent: Bob Williamson	9 5/8"	903'	903'	342
Inspector: Bill Hatfield	4 1/2"	4706'	4706'	902
Date Permit Issued: 07/24/2009				
Date Well Work Commenced: 10/05/2009				
Date Well Work Completed: 10/06/2009				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig 🗸			ECEIVED	
Total Vertical Depth (ft): 4752'			e of Oil & C	
Total Measured Depth (ft): 4752'				
Fresh Water Depth (ft.): 347'		t	EB 2'8 2013	
Salt Water Depth (ft.): None		2001	Departmen	ተ
Is coal being mined in area (N/Y)? N		AAA	Debaumo	tection
Coal Depths (ft.): None Reported		Flight		
Void(s) encountered (N/Y) Depth(s) N				
OPEN FLOW DATA (If more than two producing formation Producing formation 5th Sand Pay 2	ons please inclue zone depth (ft)_		ata on separate si	neer)
Gas: Initial open flow 133 MCF/d Oil: Initial open fl				
Final open flow NT MCF/d Final open flow				
Time of open flow between initial and final tests				
Static rock Pressure NT psig (surface pressure) af				
	ne depth (ft)	.1/1		
Gas: Initial open flow MCF/d Oil: Initial open fl				
Final open flow MCF/d Final open flow Time of open flow between initial and final tests	wBb			
Static rock Pressurepsig (surface pressure) af				
Static rock Pressurepsig (surface pressure) at	neiriou	15		
certify under penalty of law that I have personally examined				
certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those indi-				

Signature

02/15/2013

Date

Were core samples taken? Yes	ν _{ο_} XX ν	Were cuttings caught during	drilling? Yes	_ _{No_} XX
Were Electrical, Mechanical or Geophysic		ell? If yes, please list JW W	ireline GR/CCL log from	2650' - 2400'.
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECOI COAL ENCOUNTERED BY THE WI	PHYSICAL CHANGE, F RD OF THE TOPS AN	ETC. 2). THE WELL LOO D BOTTOMS OF ALL	G WHICH IS A SY FORMATIONS, II	STEMATIC
Perforated Intervals, Fracturing, or Stimu	lating:			
10/05/2009: MIRU JW Wireline & log correlation strip	& CCL/GR. Ran in hole with solid	composite plug BP & set at 2560'.	Perf 5th Sand at 2497-25	01 & 2517-2521.
Stimulated well with 75 quality N2 assist, 38,584 lbs	of 20/40 brown sand and 480,639	scf N2 (ATP 2415 psig, MTP 2703	psig) (Avg Rates 22.8 bpr	m; 14,063 scfm).
Brokedown formation at 2417 psig. Pumped a page	d of 53 bbl, 148,485 scf @ 5.7 b	pm, 14,821 scfm. Ramped sand	concentrations from .5-3	3 ppa in 97 bbl,
261,607 scf @ 7.7 bpm, 15,835 scfm. Held 3# sa	and concentration for 10 bbl, 25,0	021 scf @ 9.8 bpm, 15628 scfm	. Held 4# sand concentra	ation for 24 bbl,
45,288 scf @ 10.2 bpm, 14,297 scfm. Pumpec	281 bbl of slurry in ramp (231	bbl of clean). Flushed with 47	bbl of H2O @ 17 bpm.	ISIP 1563 psig
Plug Back Details Including Plug Type an	nd Depth(s): Drilled out	bridge plug & clean	ed to original TI	D.
Formations Encountered: Surface:	Top Depth		Bottom D	<u>epth</u>
See original submitted Well Log fo	or this well API# 47-04	1-04153.	CEIVED	
		Office	of Oil & Gas	
		FE	B 2/8/2013	
		WV D	epartment of ental Protect	 ion
				

State of West Virginia Division of Environmental Protection Section of Oil and Gas Well Operator's Report of Well Work

API# 47 - 4502190 - D

Farm name:

Western Pocahontas Prop.

Operator Well No.: MGS/Dingess Rum 13H

Cement

Fill Up

Cu. Ft.

Driven

191

466

Casing

Packers

LOCATION:

Elevation: 977'

Quadrangle: Henlawson 7.5'

Casing

æ

Tubing

16"

9-5/8"

7"

4-1/2"

Used

in

Well

60'

300'

2111'

6437'

District: Logan

County: Logan

Latitude: 37° 53'4.55 " Longitude: 81° 54' 17.6 "

Company:

EASTERN AMERICAN ENERGY CORPORATION

501 56th Street

Charleston, WV 25328

Agent: Rod Winters

Inspector: Ralph Triplett
Permit Issued: 6/24/2009

Well work commenced: 7/27/2009
Well work completed: 9/4/2009

Verbal plugging

Permission granted on:

RECEIVED
Office of Oil & Gas

Left

in

Well

60'

300'

2111'

6437'

MAR 0 5 2013

Rotary X Cable Rig

Total Depth (feet): 6813' TMD, 4394' TVD

Fresh water depths (ft): 290' Salt-water depths (ft): 751'

Is coal being mined in area? (Y/N) No

Coal Depths (ft): 44'-47', 52'-55'

WV Department of Environmental Protection

Open Flow Data

Gas:	Initial open flow	450	MCF/d	Oil:	Initial open flow	0	. Bbi/d	
	Final open flow	757	MCF/d		Final open flow	0	Bbl/d	
	Time of open flow be	tween initia	al and fina	al tests	34	Day	ys	
	Static rock pressure	560	psi	(surface	pressure) after	30D	ays	
1 st Prod	ucing Formation	Lov	ver Huror	1	Pay zone depth (ft)	3972'-	4394' TV	D
	ducing Formation				Pay zone depth (ft)			
3 rd Prod	lucing Formation				Pay zone depth (ft)			
4 th Prod	lucing Formation				Pay zone depth (ft)			

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Rodney A. Winters

T: EASTERN AMERICAN ENERGY CORPORATION

By: Designated Agent Date: 7 May 2010

45 03/700 MGS/Dingess Rum

STÁGE ONE:	Lower Huron Sliding Sleeve N2 Frac	6756' TMD	1.5 MMcf N2
STAGE TWO:	Lower Huron Sliding Sleeve N2 Frac	6531' TMD	1.5 MMcf N2
STAGE THREE:	Lower Huron Sliding Sleeve N2 Frac	6264' TMD	1.5 MMcf N2
STAGE FOUR:	Lower Huron Sliding Sleeve N2 Frac	5997' TMD	1.5 MMcf N2
STAGE FIVE:	Lower Huron Sliding Sleeve N2 Frac	5730° TMD	I.5 MMcf N2
STAGE SIX:	Lower Huron Sliding Sleeve N2 Frac	5463' TMD	i.5 MMcf N2
STAGE SEVEN:	Lower Huron Sliding Sleeve N2 Frac	5196' TMD	1.5 MMcf N2
STAGE EIGHT:	Lower Huron Sliding Sleeve N2 Frac	4929' TMD	1.5 MMcf N2
STAGE NINE:	Lower Huron Sliding Sleeve N2 Frac	4662' TMD	1.5 MMcf N2

45-02/9QD MGS/Dingess 13H WR35

Rum

FORMATION COLOR, HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh & salt water, coal, oil & gas
K.B. to G.L.	0	10	2" stream @ 290'
Fill	10	44	1/4" stream @ 751
Coal	44	47	
Sand	47	52	
Coal	52	55	
Sandy Shale	55	60	
Sand & Shale	60	1038	Gas Checks:
Salt Sand	1038	1622	2118 ' No Show
Sand & Shale	1622	1657	2145 ' No Show
Upper Maxton	1657	1693	2497 ' 70/10 thru 2"
Sand & Shale	1693	1885	2933 ' 32/10 thru 2"
Middle Maxton	1885	1906	3721 ' 38/10 thru 2"
Sand & Shale	1906	2037	4749 ' 46/10 thru 2"
Lower Maxton	2037	2086	4953 ' 128/10 thru 2"
Little Lime	2086	2140	5168 ' 116/10 thru 2"
Big Lime	2140	2400	5356 ' 2/10 thru 7"
Sand & Shale	2400	2423	5542 ' 2/10 thru 7"
Big Injun	2423	2433	5729 ' 2/10 thru 7''
Sand & Shale	2433	2876	5945 ' 2/10 thru 7"
Sunbury	2876	2902	6164 ' 2/10 thru 7''
Berea	2902	2995	6348 ' 2/10 thru 7'
Sand & Shale	2995	3972	6565 ' 2/10 thru 7''
Lower Huron	3972	•	6752 ' 2/10 thru 7"
TVD	4394		6813 ' 1/10 thru 7"

6 May 2010

State of West Virginia Division of Environmental Protection Section of Oil and Gas Well Operator's Report of Well Work

API# 47 - 4502191 - D

Farm	name
------	------

Western Pocahontas Prop.

Operator Well No.: MGS/Dingess Rum 14H

LOCATION:

Elevation: 977'

Quadrangle: Henlawson 7.5'

District: Logan

County: Logan

Latitude: 37° 53'4.9 "

Longitude: 81° 54' 18

Company:

EASTERN AMERICAN ENERGY CORPORATION

501 56th Street

Charleston, WV 25328

Agent: Rod Winters

Inspector: Ralph Triplett

Permit Issued: 6/24/2009

Well work commenced: 8/16/2009

Well work completed:

9/9/2009

Verbal plugging

Permission granted on:

Rotary X Cable Rig

Total Depth (feet): 7300' TMD, 4106' TVD

Fresh water depths (ft): 120', 197'

Salt-water depths (ft): 1243'

Is coal being mined in area? (Y/N) No

Coal Depths (ft): None

Cement Casing Used Left & in in Fill Up **Tubing** Well Well Cu. Ft. 16" 30' 30' Driven 9-5/8" 335' 225 335' 2110' 2110' 466 Casing 4-1/2" 7250 7250' **Packers**

RECEIVED Office of Oil ? Gas

MAR 0 5 2013

WV Department of Environmental Protection

Open Flow Data

Gas: Initial open flow 280 MCF/d Oil: Initial open flow Bbl/d Final open flow 291 MCF/d Final open flow Bbl/d Time of open flow between initial and final tests **Days** Static rock pressure 412 psi (surface pressure) after 16 Days 1st Producing Formation 4016'- 4106' TVD Lower Huron Pay zone depth (ft) 2nd Producing Formation Pay zone depth (ft) 3rd Producing Formation Pay zone depth (ft) 4th Producing Formation Pay zone depth (ft)

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Rodney A. Winters

, Agent

EASTERN AMERICAN ENERGY CORPORATION

By: Designated Agent Date: 7 May 2010

MGS/Dingess Rum

STAGE ONE:	Lower Huron Sliding Sleeve N2 Frac	7121' TMD	1.5 MMcf N2
STAGE TWO:	Lower Huron Sliding Sleeve N2 Frac	6857' TMD	1.5 MMcf N2
STAGE THREE:	Lower Huron Sliding Sleeve N2 Frac	6593' TMD	1.5 MMcf N2
STAGE FOUR:	Lower Huron Sliding Sleeve N2 Frac	6329' TMD	1.5 MMcf N2
STAGE FIVE:	Lower Huron Sliding Sleeve N2 Frac	6065' TMD	1.5 MMcf N2
STAGE SIX:	Lower Huron Sliding Sleeve N2 Frac	5801' TMD	1.5 MMcf N2
STAGE SEVEN:	Lower Huron Sliding Sleeve N2 Frac	5528' TMD	1.5 MMcf N2
STAGE EIGHT:	Lower Huron Sliding Sleeve N2 Frac	5211' TMD	1.5 MMcf N2
STAGE NINE:	Lower Huron Sliding Sleeve N2 Frac	4898' TMD	1.5 MMcf N2
STAGE TEN:	Lower Huron Sliding Sleeve N2 Frac	4591' TMD	1.5 MMcf N2

45 021910

MGS/Dingess

14H WR35

Rum

Kus

FORMATION COLOR, HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARK Including indication of water, coal, oil
K.B, to G.L.	0	10	Hole Damp @
Fill	10	89	3" stream @
Sand & Shale	89	1006	Hole Damp @
Salt Sand	1006	1640	. 0
Upper Maxton	1640	1686	
Sand & Shale	1686	1885	
Middle Maxton	1885	1908	Gas Check
Sand & Shale	1908	2038	3427 ' 6/10
Lower Maxton	2038	2085	3636 ' 6/10
Little Lime	2085	2140	3823 ' 6/10
Big Lime	2140	2402	4105 ' 44/
Sand & Shale	2402	2423	4323 ' 44/1
Big Injun	2423	2434	4511 ' 50/1
Sand & Shale	2434	2875	4695 ' 64/1
Sunbury	2875	2912	4910 ' 68/1
Berea	2912	2927	5125 ' 48/1
Sand & Shale	2927	4016	5311 ' 68/
Lower Huron	4016	-	5525 ' 52/
TVD	4106		5711 ' 48/
	•	•	5958 ' 48/
			6174 ' 48/
			6205 ' 72/

REMARKS Including indication of all fresh & salt water, coal, oil & gas				
Hole Damp @ 120'				
3" stream @ 197'				
Hole Damp @ 1243'				
Gas Checks:				
3427 ' 6/10 thru 2"				
3636 ' 6/10 thru 2"				
3823 ' 6/10 thru 2"				
4105 ' 44/10 thru 2"				
4323 ' 44/10 thru 2"				
4511 ' 50/10 thru 2"				
4695 ' 64/10 thru 2"				
4910 ' 68/10 thru 2"				
5125 ' 48/10 thru 2"				
5311 ' 68/10 thru 2"				
5525 ' 52/10 thru 2"				
5711 ' 48/10 thru 2"				
5958 ' 48/10 thru 2"				
6174 ' 48/10 thru 2"				
6205 ' 72/10 thru 2"				
6359 ' 75/10 thru 2"				
6545 ' 48/10 thru 2"				
6762 ' 48/10 thru 2"				
6915 ' 40/10 thru 2"				
7104 ' 44/10 thru 2"				
7261 ' 44/10 thru 2"				
7300 ' 44/10 thru 2"				

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	4/26/2012
API #:	47-049-02157

TION: Elevation: 9,711'	_ Quadrangle:	Shinnston 7.5'		
District: Lincoln Latitude: 2.510' Feet South of 39 Deg.	County: Mario			
Longitude 9,290' Feet West of 80 Deg				
Company: XTO Energy, Inc.				
PO Box 1008, Jane Lew, WV 26378	Casing &	Used in	Left in well	Cement fill
Address: FO BOX 1008, Jane Lew, W V 20378	Tubing	drilling		up Cu. Ft.
	20"	40'	40'	CTS
Agent: Gary Beall	13 3/8"	617'	617'	550 sks
Inspector: Sam Ward	9 5/8"	3,011'	3,011'	610 sks
Date Permit Issued: 4/14/2011	5 1/2"	10,151'	10,151'	1471 sks
Date Well Work Commenced: 4/30/2011	-			
Date Well Work Completed: 11/04/2011				
Verbal Plugging:				
Date Permission granted on:			:	
Rotary Cable Rig				
Total Vertical Depth (ft): 7,158'				
Total Measured Depth (ft): 10,177'				
Fresh Water Depth (ft.): 90'				
Salt Water Depth (ft.): 1,025', 1,225'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 103'				
Void(s) encountered (N/Y) Depth(s) N				

Producing formation Marcellus Pay zone depth (ft) 7,155'

Gas: Initial open flow Show MCF/d Oil: Initial open flow Bbl/d

Final open flow Show MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Oil: Initial open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

<u>4-30-1</u>2 Date

49.02157

Were core samples tak	en? Yes	No X Were cuttings caught during drilling? Yes X No
Were Electrical, Mech		vsical logs recorded on this well? If yes, please list
FRACTURING OR DETAILED GEOL	STIMULATING OGICAL REC	PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, G, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC ORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING WELLBORE FROM SURFACE TO TOTAL DEPTH.
Perforated Intervals, F	racturing, or Stin	aulating:
Stg 1 Marcellus; 9,900'-10,	082'; 72 shots; Slic	k water frac; Avg treating 7463 psi@77 bpm; 80,800#s 100 mesh; 212,700#s 30/50 mesh; 7,477 bbl water
Stg 2 Marceilus; 9,602'-9,764';	72 shots; Slick water	frac; Avg treating 7276 psi@77 bpm; 79,200#s 100 mesh; 264,800#s 30/50 mesh; 9,252 bbl water, 800 bbl treated water
Stg 3 Marcellus; 9,348'-9,5	32'; 72 shots; Slick	water frac; Avg treating 7477 psi@73 bpm; 69,300#s 100 mesh; 241,000#s 30/50 mesh; 7,444 bbl water
Stg 4 Marcellus; 9,081'-9,2	63'; 72 shots; Slick	water frac; Avg treating 8006 psi@64 bpm; 55,500#s 100 mesh; 133,675#s 30/50 mesh; 6,747 bbl water
Stg 5 Marcellus; 8,808'-8,9	90'; 72 shots; Slick	water frac; Avg treating 7560 psi@71 bpm; 52,700#s 100 mesh; 156,500#s 30/50 mesh; 5,558 bbl water
Stg 6 Marcellus; 8,535'-8,717';	72 shots; Slick water	frac; Avg treating 7574 psi@76 bpm; 73,300#s 100 mesh; 254,000#s 30/50 mesh; 7,238 bbl water, 266 bbl treated water
Plug Back Details Incl	uding Plug Type	and Depth(s):
See additional p	age	
Formations Encounte Surface:	red:	Top Depth / Bottom Depth
Fill	0 - 40	
Sand	40-100	1/2" H20 @ 90
Shale	100-103	
Coal	103-108	
Sand	108-125	
Sand/Shale	125-185	•
Sand	185-230	
Red Shale	230-248	
Grey Shale	248-325	
Shale & Sand	325-435	
Sand	435-500	·
Red Shale	500-525	
SD&SH	525-600	
SD	600-620	
See additional page	ge	

49-02157

Additional Stages

Stg 7 Marcellus; 8,262'-8,444'; 72 shots; Slick water frac; Avg treating 7677 psi@78 bpm; 222,000#s 100 mesh; 62,000#s 30/50 mesh; 6,830 bbl water, 536 bbl treated water

Stg 8 Marcellus; 7,989'-8,171'; 72 shots; Slick water frac; Avg treating 7470 psi@77 bpm; 78,100#s 100 mesh; 230,500#s 30/50 mesh; 7,100 bbl water, 761 bbl treated water

Stg 9 Marcellus; 7,716' - 7,898'; 72 shots; Slick water frac; Avg treating 7695 psi@77 bpm; 73,900#s 100 mesh; 234,200#s 30/50 mesh; 6,559 bbl water, 177 bbl treated water

6982TVD 7045TVD 7153MD 10177MD

7045TVD 7158TVD

Formation Log Continued

Marcellus

SS	620	750
SS, SH	750	897
SH	897	945
SS	945	1050
SH, SS	1050	1155
SH	1155	1285
SS	1285	1320
SH	1320	1375
SS,SH	1375	1445
SS	1445	1750
SS,SH	1750	2130
SH	2130	2200
SS	2200	2287
SH	2287	2560
SS,SH	2560	3048
SH, SLTST	3048	3310
SH,SLTST,SS	3310	3880
SH,SLTST	3880	4240
SH	4240	4330
SH,SLTST	4330	4720
SLTST,SH	4720	5200
SH,SLTST	5200	5550
SH	5550	6340
SH,SS	6340	6400
SH	6400	6900
SH,LS	6900	6920
SH	6920	7000
LS, SH	7000	7220
SH	7220	10177
Burkett	6916MD	6981MD
	6879TVD	6929TVD
Tully	6981MD	7052MD
-	6929TVD	6982TVD
Hamilton	7052MD	7153MD

Damp @ 1025'

1" Stream H20 @ 1225'

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	2/27/2013	
API#:	47-5902215	

ATION: Elevation: 700.6	_ Quadrangle:	Quadrangle: Matewan			
District: Magnolia	_ County: Min	go			
Latitude: 11,059 Feet South of 37 Deg			 ec.		
Longitude 2.247 Feet West of 82 De		n. 30 Se	ec.		
Company: Kinzer Drilling Company					
Address: PO Box 460	Casing & Tubing	Used in drilling	Left in well	Cement fil up Cu. Ft.	
Allen, KY 41601	9 5/8"	53'	53'		
Agent: James Hill	7"	255'	255'	59	
Inspector: Barry Stollings					
Date Permit Issued: 5/17/2011					
Date Well Work Commenced: 8/18/2011					
8/04/0044					
Verbal Plugging: 8/24/2011				 	
Date Permission granted on: 8/24/2011				1	
Rotary Cable Rig					
Total Vertical Depth (ft): 445'					
Total Measured Depth (ft): 445'					
Fresh Water Depth (ft.): 200', 345'					
Salt Water Depth (ft.): NONE					
Is coal being mined in area (N/Y)? No					
Coal Depths (ft.): N/A					
Void(s) encountered (N/Y) Depth(s) NONE					
OPEN FLOW DATA (If more than two producing forma	tions please incl	ude additional	data on cenarate (sheet)	
	y zone depth (ft)		data on separate .	silect)	
Gas: Initial open flowMCF/d Oil: Initial open	flow I	Bbl/d			
Final open flowMCF/d Final open flo					
Time of open flow between initial and final tests	Hour				
Static rock Pressurepsig (surface pressure)		urs	f 1900 e		
Second producing formation Pay 2	zone denth (ft)			A. 7	
Gas: Initial open flow MCF/d Oil: Initial open					
Final open flowMCF/d Final open flowMCF/d			MAR 8 3	140	
Time of open flow between initial and final tests			4X-67 c	•	
Static rock Pressurepsig (surface pressure)					

all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

2/26/13 Date

Were core samples taken?	Yes	No_X	Were	cuttings caught during	drilling? Yes	NoX
Were Electrical, Mechanical	or Geophy	sical logs reco	orded on this well?	f yes, please list No		
NOTE: IN THE AREA FRACTURING OR STIM DETAILED GEOLOGIC COAL ENCOUNTERED	IULATING CAL RECO	G, PHYSICA DRD OF TH	L CHANGE, ETC. IE TOPS AND B	2). THE WELL LOC OTTOMS OF ALL	G WHICH IS A SY FORMATIONS,	YSTEMATIC
Perforated Intervals, Fractur	ing, or Stim	nulating:				
Well was not treated. It	was plug	ged 8/24/2	011			
	i					
Div. Book Details Insluding	Dlug Tung	and Donth(s):		11.1 400l.	Olean A 00/	
Plug Back Details Including surface, 4.5" annulus						
Surface, 4.5 Ermala.	3 00 0K0	010007(2	-70. Comone o	o danass (rooms	0.0007.9	
Formations Encountered: Surface:			Top Depth	/	Bottom I	<u>Depth</u>
UPPER SALT SAND	380'/44	.5'				
						
					<u> </u>	

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	02/12/2013	
API#:	47-091-01206	

TION: Elevation: 1273' GL	Quadrangle:	Grafton 7.5'		
District: Courthouse	County: Tay	lor		
Latitude: 13,288 Feet South of 39 Deg.	20 Mir	00Sec		·
Longitude 7.546 Feet West of 80 Deg.	05 Min	Sec	: .	
PDC Mountaineer LLC				
Company:	Casing &	Used in	Left in well	Cement fill
Address: 120 Genesis Boulevard	Tubing	drilling	Den in wen	up Cu. Ft.
Bridgeport, WV 26330	20"	80'	80'	Surface
Agent: Bob Williamson	13 3/8"	465'	465'	466
Inspector: Joe McCourt	9 5/8"	2782'	2782'	1140
Date Permit Issued: 12/10/2010	5 1/2"	14,015'	14,015'	3726
Date Well Work Commenced: 12/16/2011				
Date Well Work Completed: 04/11/2012	2 7/8"		8172'	
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				TO STEP OF THE PARTY NAMED ASSESSMENTS
Total Vertical Depth (ft): 7774'				EIVED
Total Measured Depth (ft): 14,032'			Office	f Oil 3 Gas
Fresh Water Depth (ft.): Drilled from surf on air/foam			FEB	1 9 2013
Salt Water Depth (ft.): Drilled from surf on air/foam				
Is coal being mined in area (N/Y)? N			WV De	partment of
Coal Depths (ft.): 78', 783'			Environme	ntal Protec
Void(s) encountered (N/Y) Depth(s) N				
Producing formation Marcellus Pay z Gas: Initial open flow MCF/d Oil: Initial open flow Time of open flow between initial and final tests Gecond producing formation N/A Pay zor Gas: Initial open flow between MCF/d Oil: Initial open flow Time of open flow between initial and final tests 72 Gas: Initial open flow MCF/d Oil: Initial open flow Time of open flow MCF/d Final open flow Time of open flow between initial and final tests Gastatic rock Pressure psig (surface pressure) affiliation of open flow psig (surface pressure) affiliation open flow Time of open flow between initial and final tests Gastatic rock Pressure psig (surface pressure) affiliation open flow	cone depth (ft) ow Bt / Bt 0	7767' bl/d bl/d bl/d bl/d bl/d	ata on separate si	neet)

all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature 02/15/2013
Date

91-01206 XX N

Were core samples taken? Yes	No_XX Were	e cuttings caught during d	rilling? Yes_XX_No
Were Electrical, Mechanical or Geophys		If you place list Mud Log fi	rom 6600'- 14,032'. SLB open hole LWD
EcoScope Image /GR/Dens/Neutron & SLB Sonic Scan	ner from 8,442-13,553. Pathfinder Directiona	If yes, please list surveys from 6,433-14,032 (GR fro	m 6,488 to TD).
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING DETAILED GEOLOGICAL RECO COAL ENCOUNTERED BY THE W	, PHYSICAL CHANGE, ETC RD OF THE TOPS AND B	c. 2). THE WELL LOG SOTTOMS OF ALL FO	WHICH IS A SYSTEMATIC
Perforated Intervals, Fracturing, or Stime	ılating:		
Perforated interval 10,809 ft 13,8			
bbls of Slickwater carrying 740,5	00 lbs of 100-mesh sand	, 2,632,800 lbs of 40	/70 sand, and 77,200 lbs
of 30/50 sand.			
Plug Back Details Including Plug Type a	nd Depth(s):		
Formations Encountered: Surface:	Top Depth	, , , , , , , , , , , , , , , , , , ,	Bottom Depth
Little Lime (est)	1522	1537	
Big Lime (est)	1559	1741	
Gantz (est)	2000	2018	
50 Foot (est)	2057	2141	
30 Foot (est)	2155	2209	
Gordon(est)	2230	2266	RECEIVED
4th Sand (est)	2477	2535	Office of Oil & Gas
5th Sand (est)	2551	2595	FEB 1 9 2013
Riley (est)	4155	4423	
Benson (est)	4525	4575	WV Department of
Sycamore	6773	6881	Environmental Protection
Geneseo	7462	7478	
Tully	7478	7544	
Marcellus	7706	14,032' M	D-TD
All denths are KB (19') TVD exce	nt MD-TD Depths bo	elow Benson from di	rectional "GR-TVD" Log.

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	02/11/2013	
API#:	47-091-01251	

Farm name: Patriot Mining Company	Operator Well	l No.: Coaltrain	8HM	
LOCATION: Elevation: 1273' GL	Quadrangle: _	Grafton 7.5		
District: Courthouse Latitude: 13,262 Feet South of 39 Deg. Longitude 7,562 Feet West of 80 Deg.		or 00		
Company: PDC Mountaineer LLC				
Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	20"	80'	80,	Surface
Agent: Bob Williamson	13 3/8"	470'	470'	383
Inspector: Joe McCourt	9 5/8"	2779'	2779'	1140
Date Permit Issued: 11/30/2011	5 1/2"	13,611'	13,611'	3915
Date Well Work Commenced: 12/26/2011		· · · · · · · · · · · · · · · · · · ·	,	
Date Well Work Completed: 05/16/2012	2 7/8"		8160'	
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 7,775'				
Total Measured Depth (ft): 13,615'				
Fresh Water Depth (ft.): Drilled from surf on air/foam				
Salt Water Depth (ft.): Drilled from surf on air/foam				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 78', 783'				
Void(s) encountered (N/Y) Depth(s) N				
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay z Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow 4,721 MCF/d Final open flow Time of open flow between initial and final tests 72 Static rock Pressure 1,500 psig (surface pressure) after the producing formation open flow producing formation producing forma	cone depth (ft)	7767' 51/d 1/d	R	heet) ECEIVED e of Oil & Gas
Second producing formation N/A Pay zor Gas: Initial open flow MCF/d Oil: Initial open flow	ne depth (ft) owBt	 ol∕d	FI	EB 1 9 2013
Final open flowMCF/d Final open flow Time of open flow between initial and final tests	Hours			epartment of nental Protection
I certify under penalty of law that I have personally examined a all the attachments and that, based on my inquiry of those individual that the information is true, accurate, and complete.				
'abullin		02/1	5/2013 Data	
Signature			Date	

Were core samples taken? YesNo_XX	Wo	ere cuttings caught during drill	ing? Yes_XX_No	
Were Electrical, Mechanical or Geophysical logs reco	orded on this well	? If yes, please list Mud Log from 68	50°- 13,615° SLB open hale LWD EcoScope	
NOTE: IN THE AREA BELOW PUT THE FRACTURING OR STIMULATING, PHYSICA DETAILED GEOLOGICAL RECORD OF TH COAL ENCOUNTERED BY THE WELLBORE	FOLLOWING L CHANGE, ET IE TOPS AND	: 1). DETAILS OF PERI C. 2). THE WELL LOG WI BOTTOMS OF ALL FOR	FORATED INTERVALS, HICH IS A SYSTEMATIC	
Perforated Intervals, Fracturing, or Stimulating:				
Perforated interval 8,515 ft - 13,500 ft (760 s	hots). Frac'd 1	19 stages using 452 bbls	15% HCL, and 173,500	
bbls of Slickwater carrying 1,336,400 lbs of	100-mesh san	nd, 4,572,400lbs of 40/70	sand, and 143,200 lbs	•
of 30/50 sand.			_	•
				-
	······································			-
Plug Back Details Including Plug Type and Depth(s):				
				-
Formations Encountered: Surface:	Top Depth	1	Bottom Depth	
Little Lime (est)	1522	1537		
Big Lime (est)	1559	1741		•
Gantz (est)	2000	2018	RECEIVED	•
50 Foot (est)	2057	2141	Office of Oil & Ga	18
30 Foot (est)	2155	2209	EED 4 0 2012	•
Gordon(est)	2230	2266	FEB 1 9 2013	•
4th Sand (est)	2477	2535	WV Department	of
5th Sand (est)	2551	2595	nvironmental Prote	ection
Riley	4155	4508		
Benson	4664	4704		r
Sycamore	6772	6888	Show Gas	•
Geneseo	7461	7478	Show Gas	
Tully	7478	7548		•
Marcellus	7708	13,615' MD-T	D Show Gas	_
All depths are KB (19') TVD except MD-TD.	Depths belo	w 5th Sand are from dire	ectional "GR-TVD" Log.	•

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	02/14/2013	
API#:	47-091-01252	

Farm name: Patriot Mining Company	Operator Well	No.: Coaltrain	9НМ	
LOCATION: Elevation: 1273'GL	Quadrangle: _	Grafton 7.5'		
District: Courthouse	County: Taylo			
Latitude: 13,249 Feet South of 39 Deg.		. 00 Sec		
Longitude 7.570 Feet West of 80 Deg.	05 Min.	Sec	•	
Company: PDC Mountaineer LLC				
Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	20"	80'	80'	Surface
Agent: Bob Williamson	13 3/8"	462'	462'	383
Inspector: Joe McCourt	9 5/8"	2779'	2779'	1068
Date Permit Issued: 11/30/2011	5 1/2"	14,372'	14,372'	3802
Date Well Work Commenced: 12/29/2011				
Date Well Work Completed: 05/16/2012	2 7/8"		8234'	
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 7,772'				
Total Measured Depth (ft): 14,392'				
Fresh Water Depth (ft.): Drilled from surf on air/foam				
Salt Water Depth (ft.): Drilled from surf on air/foam				
Is coal being mined in area (N/Y)? N			_	
Coal Depths (ft.): 78', 783'				
Void(s) encountered (N/Y) Depth(s) N		<u></u>		
OPEN FLOW DATA (If more than two producing formation Producing formation Pay Gas: Initial open flow 6,250 MCF/d Oil: Initial open f	zone depth (ft)_	7767'		
Final open flow 3,888 MCF/d Final open flow		ol/d	RECEIV	/ED
Time of open flow between initial and final tests 7 Static rock Pressure 1,650 psig (surface pressure) at		ire C	Office of O	8 Gas
Second producing formation N/A Pay zo			FEB 19	
Gas: Initial open flow MCF/d Oil: Initial open f		1.1/1		
Final open flow MCF/d Final open flow	.vBl		WV Depar	tment of
Time of open flow between initial and final tests		; En	/ironmenta	al Protection
Static rock Pressurepsig (surface pressure) at	tterHou	irs		
I certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those indi	and am familia viduals immedi	r with the infor ately responsit	mation submitte de for obtaining	d on this document and the information I belie
that the information is true, accurate, and complete.				
Tob We	-	02	/15/2013	
Signature			Date	

91-01252

Were core samples taken? YesNo_XX	Wei	re cuttings caught during dril	ling? Yes_XX_No
Were Electrical, Mechanical or Geophysical logs recon	rded on this well?	If yes, please list Mud Log from 6	5900'- 14,392'.SLB open hale LWD EcoScope
SanicVision Image /GR/Dens/Neutron from 8,422'-14,366'. Pathfinder Direction	ctional surveys from 2,80	8'- TD (GR from 5,950' to TD). SLB 3D	Bore Hole Caliper.
NOTE: IN THE AREA BELOW PUT THE FRACTURING OR STIMULATING, PHYSICAL DETAILED GEOLOGICAL RECORD OF TH COAL ENCOUNTERED BY THE WELLBORE	CHANGE, ETO E TOPS AND I	C. 2). THE WELL LOG W BOTTOMS OF ALL FO	HICH IS A SYSTEMATIC
Perforated Intervals, Fracturing, or Stimulating:			
Perforated interval 10,809 ft - 13,850 ft (400 s			
bbls of Slickwater carrying 740,500 lbs of 1	00-mesh sand	I, 2,632,800 lbs of 40/7	70 sand, and 77,200 lbs
of 30/50 sand.			
Plug Back Details Including Plug Type and Depth(s):			
Plug Back Details including Plug Type and Depun(s).			
Formations Encountered: Surface:	Top Depth	1	Bottom Depth
Little Lime (est)	1522	1537	
Big Lime (est)	1559	1741	
Gantz (est)	2000	2018	Office of Oil & Gas
50 Foot (est)	2057	2141	
30 Foot (est)	2155	2209	FEB 1 9 2013
Gordon(est)	2230	2266	10010
4th Sand (est)	2477	2535	WV Department of
5th Sand (est)	2551	2595	nvironmental Protection
Riley (est)	4155	4508	
Benson (est)	4664	, 4704	
Sycamore	6774	6878	Show Gas
Geneseo	7458	7472	Show Gas
Tully	7472	7536	
Marcellus	7701	14,392' MD-	TD Show Gas
All depths are KB (19') TVD except MD-TD	Depths below	Benson are from direct	ctional "GR-TVD" Log.

DATE:	1/2/04
API:	47-097-03490

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

							·**)_
Farm Name: C	huck Mar	ole	Oper	ator We	eli No	C.Marple A	#3 B0803 (2)
LOCATION						_ 	tal p.,
		1,323			angle:		<u>in</u>
District:		arren	_	C	ounty:	Upst	
		Feet S. of					Sec.
Longitude:	8,605	Feet W. of	80	Deg	15Min	00	Sec.
Company: Devonian (Gas Produ	ction,Inc.		_			
		n	O!	o fi	lland!		· 11 o
Address: PO Box 90	7	,	Casir	_	Used in	· 13	Cement fill
			Tub		Drilling		ell up Cu. Ft.
Jane Lew,	VVV 203/8)	9 5		30	conduct	
Agont:		he Hadia	7'		1096'	1096'	
Agent:		hn Haskins	4 1/	/Z"	-5031'	- 5031'	240 sks
Inspector:	Craig	Duckworth					_
Date Permit Issued:	Anner -1:	02/14/08					
Date Well Work Comm		04/21/08					_
Date Well Work Comp	leted:	05/07/08					
Verbal Plugging:	1 - 1						
Date Permission Gran							
	Rig						
Total Depth (ft):		5178'					
Fresh Water Depth (ft)): 	300'					_
Salt Water Depth (ft):		none					
la anal haire artis di	4h =	//N/C					
Is coal being mined in Coal Depths (ft):		r/N)?	N				
	·						
OPEN FLOW DATA					_		
Producing t	formations			_	Pay zone o	depth (ft)	1911'
		Bradfo		_		_	3360'
		Benso	on	_		_	4557'
		Elk		_		<u>-</u>	4952'
						-	
				_		-	
Ones In West	A	04	M = E/ = 1 = 4	S9. 1 .99		8448	
Gas: Initial	•				al open flo		Bbl/d
	open flow		Vicf/d.		al open flo		Bbl/d
		ween initial a		_	5	Hours	1.6
Static rock	(Pressure	<u>1650</u> p	osıg (su	пасе р	ress.) afte	r <u>48</u>	Hours
NOTE: On back of this	form put f	he following:	1) Deta	aile of n	erforsted i	intervale frect	uring or
stimulating, physical ch							
record of all formations						, detailed get	iogical
. Journal of all formations	,o.uumg	, Joan Gricouri	Keleu D	y 1110 W	511DO1 5.		
Signed:	1. 1.						
By:	man a		-	_			
Date: //	2/19			-			

HYDRAULIC FRACTURING DETAILS

# of shots 1st Stage Elk 12 2nd Stage Benson 10 3rd Stage Bradford 10	35,000
2nd Stage Benson 10	
2nd Stage Benson 10	
	25,000
old oldgo	20,000
4th Stage Injun 12	20,000

DRILLERS LOG

FORMATION	FROM	ТО
fill	0	18
red rock	18	30
sand & shale	30	97
red rock	97	296
sand & shale	296	705
coal	705	710
sand & shale	710	1,663
Little Lime	1,663	1,685
sand & shale	1,685	1,720
Big Lime	1,720	1,845
Injun	1,845	1,918
sand & shale	1,918	2,531
Fifth Sand	2,531	2,560
sand & shale	2,560	2,611
Bayard	2,611	2,646
sand & shale	2,646	3,704
Bradford	3,704	3,714
sand & shale	3,714	4,547
Benson	4,547	4,561
sand & shale	4,561	4,935
Elk	4,935	4,946
sand & shale	4,946	TD
	1	
	1	
	 	

ELECTRIC LOG

FORMATION	DEPTH
Big Lime	1,730
Fourth Sand	2,410
Fifth Sand	2,530
Bayard	2,615
Bradford	3,705
Riley	4,264
Benson	4,550
Elk	4,935

DATE:	3/15/11
API:	47-097-03650

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

Farm Nam	n <u>e:</u>	Darrell Crite	es	Opera	tor W	ell No.	•	Loudin #4 D	00904	े <u>१</u> ०६६५ -
LOCATIO			1817.04'		Quadr	_		Rock Ca		.j -
	District		eade			ounty:		〔Upshui	Para Sala	5 4 _ 6
	Latitude	4410'	Feet S. of	38	_Deg.	52	_Min. °	~	ec.	it of
	Longitude	750'	_Feet W. of	80	_Deg.	15	_Min.	00Se	ec. `	^b ction
Company	Devonian	Gas Produ	ction,Inc.		-					
			1	Casin	g& 🏻	Us	ed in		Cement fill	
Address:	PO Box 9	07		Tubi	ng	Di	rilling	Left in Wel	up Cu. Ft.	
	Jane Lew	WV 26378	3	9 5/	8		30	30		
				7"		9	973'	973'	to surface	
Agent:		J	ohn Haskins	4 1/:	2"	n	one	3977'	180 sks	H
Inspector:			Bill Hatfield							
	nit Issued:		06/12/09							H
Date Well	Work Com	menced:	10/13/09						<u> </u>	
Date Well	Work Com	pleted:	11/04/09							
Verbal Plu]				<u> </u>	
Date Perr	nission Gra	nted on:								
Rotary X	Cable	Rig								
Total Dep	th (ft):		4020'							ll .
Fresh Wa	ter Depth (1	ft):	87'							
							_		<u> </u>]]
Salt Wate	r Depth (ft)	· ·	NA NA							-
										-
	ing mined i		Y/N)?	<u>N</u>	_					
Coal	Depths (ft)	: <u>NA</u>								-
OPEN FL	OW DATA	. C 4!	Dil.			Dov =	ono do	oth (ft)	3482'	
	Producing	g formations			_	Pay z	one de	pui (ii)	3 4 62	-
			Bens	son	_				3022	-
					-					_
					_					-
										-
					_					-
				94-51-1	N:1. 1:4	ial and	on flow	N/A B	bl/d	
		al open flov		Mcf/d. (•			bi/d bl/d	
		al open flow		Mcf/d.		•	en flow 5	Hours	bira	
			tween initial						ours	
	Static ro	ck Pressur	e <u>750</u>	psig (su	mace	press.) aitei	40 11	Ouis	
NOTE: O	n back of th	nis form put	the following	j: 1) Deta	ails of	perfor	ated int	ervals, fractu	ring or	
stimulatir	ig, physical	change, et	c. 2) The we	II log whi	ich is a	ı syste	ematic d	letailed geolo	gical	
record of	all formation	ns, includir	ig coal encou	ıntered b	y the	wellbo	re.			
		a 1								
Signed	i:				_					
-	By:	em	7		_					
	Date: 3	1/5/11			_					
		,								

97-03650

HYDRAULIC FRACTURING DETAILS

STAGE	FORMATION	PERFORATIONS	SAND
		# of shots	20/40
1st Stage	Benson	14	40,000
2nd Stage	Riley	10	25,000

DRILLERS LOG

DRILLERS LOG						
FORMATION	FROM	ТО				
Fill	0	30'				
shale	30'	416'				
sand & shale	416'	466'				
sand & shale	466'	502'				
sand & shale	502'	1268'				
Big Lime	1268'	1316'				
sand & shale	1316'	2012'				
Gordon	2012'	2127'				
sand & shale	2127'	2261'				
Fifth Sand	2261'	2384'				
sand & shale	2384'	3582'				
Riley	3582'	3663'				
sand & shale	3663'	3816'				
Benson	3816'	TD				

ELECTRIC LOG

FORMATION	DEPTH
Big Lime	1316'
Gordon	2127'
Fifth Sand	2384'
Riley	3482'
Benson	3822'
_	

DATE:	3/15/11
API:	47-097-03678

State of West Virginia Division of Environmental Protection Section of Oil and Gas

RECEIVED

[*

Well Operator's Report of Well Work

Farm Name: Hartzel Marple	_ Operator W	/ell No	Jones #7 D	
LOCATION: Elevation: 1490.67' District: Warren		rangle:	::Berlin	A Jepann
		County:	Upsnui	ental i
- , , _ ,		05_ Min.		€C. ************************************
Longitude: 7920' Feet W. o	f <u>80</u> Deg	. <u>15</u> Min.	00Se	ec.
Company: Devonian Gas Production,Inc.				
Address: PO Box 907	Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. Ft.
Jane Lew, WV 26378	9 5/8	30	conductor	
	7"	1263'	1263'	to surface
Agent: John Haskins	4 1/2"		5256'	230 sks
Inspector: Bill Hatfield		· · · · · · · · · · · · · · · · · · ·		
Date Permit Issued: 09/04/09			1	
Date Well Work Commenced: 10/29/09				
Date Well Work Completed: 11/17/09				
Verbal Plugging:				
Date Permission Granted on:				
Rotary X Cable Rig	1			
Total Depth (ft): 5325	7			
Fresh Water Depth (ft): n/a				
110011110110110110110110110110110110110	<u> </u>			
Salt Water Depth (ft): NA	\			<u> </u>
Is coal being mined in the area (Y/N)? Coal Depths (ft): n/a	N			
OPEN FLOW DATA				
Producing formations 5th S	Sand	Pay zone dep	th (ft)	2753'
	Iford	•	-	3899'
	son			4745'
<u> </u>	lk			5132'
			_	
Gas: Initial open flow odor	Mcf/d. Oil: Ini	tial open flow	N/A BI	ol/d
Final open flow 220		nal open flow		ol/d
Time to open flow between initia		•	Hours	
Static rock Pressure 1650	_psig (surface			ours
NOTE: On back of this form put the followin stimulating, physical change, etc. 2) The we record of all formations, including coal enco	ell log which is	a systematic de	ervals, fractui etailed geolo	ring or gical
	•			
Signed: By:				
Date: 3/15/11				

HYDRAULIC FRACTURING DETAILS

STAGE	FORMATION	PERFORATIONS	SAND	
		# of shots	20/40	
1st Stage	Elk	12	30,000	
2nd Stage	Benson	10	30,000	
3rd Stage	Bradford	10	25,000	
4th Stage	5th Sand	12	10,000	

DRILLERS LOG

	LLING LOG	
FORMATION	FROM	ТО
Fill	0	15
sand & shale	15	225
red rock & shale	225	577
sand & shale	577	1,115
red rock & shale	1,115	1,296
Little Lime	1,296	1,430
red rock	1,430	1,930
Big Lime	1,930	2,001
Injun	2,001	2,010
sand & shale	2,010	2,755
Fifth Sand	2,755	2,820
Bayard	2,820	2,867
sand & shale	2,867	3,963
Bradford	3,963	3,993
sand & shale	3,993	4,767
Benson	4,767	4,867
sand & shale	4,867	5,187
Elk	5,187	TD
	1	
	 	
	 	
		<u> </u>

ELECTRIC LOG

930
000
755
820
963
767
187

DATE:	3/15/11
API:	47-097-03709

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

	·						VV	$V_{\mathcal{D}_{\mathcal{E}_{\mathcal{L}}}}$
Farm Name: Cornwell		Operator Well No.				RIGIALITA DOCTO		
LOCATION:	Elevation:	1.703		Quadr	angle:	:		The second programs in
	rict: War			ounty:			shur	
l atitu	de: 9720'	Feet S. of	30	Den	0011ty. 07	Min		Sec.
	de: 7550'					_		Sec.
						_		
Company: Devoni	an Gas Product	ion,Inc.	<u>-</u> =.	_				•
·			Casir	ng&	Us	ed in	1	Cement fill
Address: PO Box	k 907		Tub		Di	rilling	Left in We	ell up Cu. Ft.
Jane L	ew, WV 26378		9 5	/8		30'	30'	
				,	1	022'	1022'	to surface
Agent:	Jol	n Haskins	4 1	/2"			5521'	225 sks
Inspector:		Bill Hatfield						
Date Permit Issue		01/15/10						
Date Well Work C		02/02/10						
Date Well Work C		02/24/10						
Verbal Plugging:								
Date Permission C	Franted on:							
Rotary X Cable								
Total Depth (ft):		5580'						
Fresh Water Dept	h (ft):	548'						
Salt Water Depth	(ft):	n/a						
Is coal being mine	d in the area (Y	/N)?	N	_				
Coal Depths	(ft):		n/a					
OPEN FLOW DA	ΓA							
Produc	cing formations				Pay z	one dep	oth (ft)	14501
		Brad		_			_	4153'
	•	Bens		_			_	4997'
		El	k	_			_	5389'
							_	
							_	
	_					•	NI/A 1	DEIM
	nitial open flow	165	-			en flow	-	Bbl/d
	Final open flow	275	Mcf/d.			en flow		Bbl/d
	o open flow bet		and fina	al tests:		4	Hours	Llaura
Station	c rock Pressure	1575	_psig (s	urtace	press.) aπer	48	Hours
			4					uring or
NOTE: On back of	of this form put t	ne following	j: 1) Del	alls of	pertor	ated inte	ervais, iraci	umg u Iogical
stimulating, physi-	cal change, etc.	2) The we	II log wh	nich is a	a syste	ematic d	etalled geol	ogical
record of all forma	ations, including	coal encou	ıntered	by the	wellbo	ге.		
	5/1	•						
Signed:	And the	1		_				
<u>By:</u>	2/1-1			_				
n-4	71/1 P / A.							

HYDRAULIC FRACTURING DETAILS

STAGE	FORMATION	RMATION PERFORATIONS	
		# of shots	20/40
1st Stage	Elk	12	35,000
2nd Stage	Benson	12	40,000
3rd Stage	Bradford	10	30,000

DRILLERS LOG

DRILLERS LOG				
FROM	TO			
0	245			
245	252			
252	310			
310	360			
360	1,159			
1,159	1,472			
1,472	1,650			
1,650	1,761			
1,761	1,809			
1,809	2,112			
2,112	2,170			
2,170	3,030			
3,030	3,045			
4,130	4,202			
4,202	5,004			
5,004	TD			
	FROM 0 245 252 310 360 1,159 1,472 1,650 1,761 1,809 2,112 2,170 3,030 4,130 4,202			

ELECTRIC LOG

FORMATION	DEPTH
Big Lime	2,112 3,030
Bayard	3,030
Bayard Bradford	4,130
Benson	4,979
Elk	5,389
	-
	<u> </u>

DATE:	3/15/11
API:	⁷ 47-097-03722

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

Farm Nam	n <u>e:</u>	Cutright		Operat	or Wel	l No	Thomas #1	20913
	N:	Elevation:	2141 051			ngle:	Alton	
LOOATIO	District:		2141.05 ade			unty:		
	l atitude:	8710'	Feet S. of	38		52 Min.	30 S	
	•							
	Longitude:	1010	reet vv. or	80	Deg	12 Min.	<u>30</u> S	ec.
Company	Devonian C	Sas Produc	tion,Inc.					
				Casing	&	Used in		Cement fill
Address:	PO Box 90	7		Tubin	u	Drilling	Left in We	up Cu. Ft.
	Jane Lew,	WV 26378		9 5/8		30	30	
		 		7"		936'	936'	to surface
Agent:	· · · · · · · · · · · · · · · · · · ·	Jol	hn Haskins	4 1/2		none	4115'	165 sks
Inspector:			Bill Hatfield				<u> </u>	1
Date Perm		<u>`</u>	03/23/10					1
	Work Comm	nenced:	03/31/10					-[
	Work Comp		04/16/10					1
Verbal Plu			J 10/ 10					1
	nission Gran	ted on:					1	1
		Ria						1
Total Dep			4148'				1	1
	ter Depth (ft	·	87'				-	1
1 ICSII VVA	iter Deptii (it	<i>!</i> ·	- 01					
Salt Wate	r Depth (ft):		NA					
	ing mined in		/N)?	N				
Coal	Depths (ft):	NA						
OPEN FL	OW DATA							
	Producing	formations	4ti	h	P	ay zone de	pth (ft)	2206'
	•	•	5tl	h		-		2316'
		•	Elizal	peth			_	2390'
		•	Bens	son			_	3994'
							_	
	Gas: Initia	l open flow	odor	Mcf/d. Oi	il: Initia	il open flow	N/A E	sbl/d
	Fina	l open flow	200	Mcf/d.	Fina	l open flow	N/A E	bl/d
		en flow bet	ween initial	and final t	tests:	. 8	Hours	
	•	k Pressure				ress.) after	48H	lours
stimulatin	g, physical of all formation	hange, etc.	2) The we	II log whic	h is a s	systematic d	ervals, fractu letailed geolo	
	Date: 3	115-111						

HYDRAULIC FRACTURING DETAILS

97-03722

1st Stage	Benson	# of shots	20/40
	Benson	12	45.000
	D0110011 .	12	45,000
2nd Stage	Elizabeth	12	25,000
3rd Stage	5th sand	10	25,000
	4th sand	14	30,000

DRILLERS LOG

DRILLERS LOG			
FORMATION	FROM	ТО	
Fill	0	30'	
shale	30'	416'	
sand & shale	416'	466'	
sand & shale	466'	502'	
sand & shale	502'	1500'	
Big Lime	1500'	1702'	
sand & shale	1702'	2206'	
4th Sand	2206'	2227'	
sand & shale	2227'	2316'	
Fifth Sand	2316'	2340'	
sand & shale	2340'	2450'	
Elizabeth	2450'	2460'	
sand & shale	2460'	3994'	
Benson	3994'	TD	

ELECTRIC LOG

FORMATION	DEPTH
Big Lime	1500'
4th Sand	2206'
Fifth Sand	2316'
Elizabeth	2450'
Benson	3994'

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE: **API** #:

March 19,2012

47-103-02612

REVISED FOR COMPLETION

LOCATION: Elevation: 1,300' District: Magnolia	Quadrangle:	Now 8		
Diamiat. Magnolia		IAGM I	/lartinsville	
Latitude: 12,790 Feet South of 39 Deg. Longitude 1,100 Feet West of 80 Deg.	County:	Sec.		<u>.</u>
Company: STONE ENERGY CORPORATION				
Address: 6000 Hampton Center, Suite B	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Morgantown, WV 26505	20"	43'	43'	Grouted to Surface
Agent: Tim McGregor	13-3/8"	1,248'	1,248'	1,121 - CTS
Inspector: Derek Haught	9-5/8"	2,508'	2,508'	1,080 - CTS
Date Permit Issued: 01/11/2011	5-1/2"		12,419'	2,988
Date Well Work Commenced: 02/11/2011	2-3/8"		7,021'	
Date Well Work Completed: 10/25/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary \(\sqrt{Cable} \) Rig				
Total Vertical Depth (ft): 6,572				
Total Measured Depth (ft): 12,421				
Fresh Water Depth (ft.): 114				
Salt Water Depth (ft.): 1,710				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 1,022				
Void(s) encountered (N/Y) Depth(s) None				
OPEN FLOW DATA (If more than two producing formation Producing formation MARCELLUS Pay 2 Gas: Initial open flow 550 MCF/d Oil: Initial open flow Time of open flow between initial and final tests	zone depth (ft)_lowBl	<u>7,051' MD</u> to 12,2 bl/d ol/d	61' MD	CEVED
Static rock Pressure 1,850 psig (surface pressure) af	ter <u>1</u> Hou	rs	Office (of Oil & Gas
Second producing formation Pay zoo Gas: Initial open flow MCF/d Oil: Initial open fl		 bl/d	MAR	2 0 2012
Gas: Initial open flowMCF/d Oil: Initial open flowMCF/d Final open flowMCF/d Final open flowMCF/d Final open flowpsig (surface pressure) af	yBb Hours	ol/d	WV De Environma	pareneat of ental Protection

ve all the attachments and that, based on my inquiry of those individuals immediately responsible for obta that the information is true, accurate, and complete.

Were core samples taken? Yes NoX	Were cuttings car	ught during drilling?	Yes_X_No
Were Electrical, Mechanical or Geophysical logs record and CBL.	ded on this well? If yes, pleas	e list_MWD Gamı	ma, Mud Log,
NOTE: IN THE AREA BELOW PUT THE FRACTURING OR STIMULATING, PHYSICAL DETAILED GEOLOGICAL RECORD OF THE COAL ENCOUNTERED BY THE WELLBORE FOR Perforated Intervals, Fracturing, or Stimulating:	CHANGE, ETC. 2). THE VECTORS AND BOTTOMS	VELL LOG WHICH OF ALL FORMAT	IS A SYSTEMATIC
Perforated 15 individual intervals from 12,261' MD			
stimulations. Total volumes pumped were 677,994			
5,673,668 gals. Fresh Water (99.1869%), 65 gals.			
1,162 gals. Bio-Cide (0.0205%), 3,647 gals. Frictio			
3,725 gals. Surfactant (0.0657%), 891 lbs. Breaker			, 1,086 gals. Clay
Stabilizer (0.0191%), 31,768 gals 15% HCl (0.5599	9%), and 2,010 gals. 28% H	CI (0.0354%).	
Plug Back Details Including Plug Type and Depth(s):			
Formations Encountered: Surface:	Top Depth /		Bottom Depth
See attached sheet for the formations encou	ntered and their depths.		
			
		•	PECENTO
		Off	ice of Ciringas
			MAR 2 0 2012
		Fraire	Department of
			amental Protection

103-026/2

Talkington-Nice #1H API 47-103-02612 Stone Energy Corporation Horizontal

	Тор	Тор	(ft		Bottom (ft	Bottom (ft
	(ft TVD)	MD))		TVD)	MD)
Sandstone & Shale	Surface			*	1022	
Pittsburgh Coal	1022			*	1027	
Sandstone & Shale	1027			*	1992	
Little Lime	1992			*	2034	
Sandstone & Shale	2034			*	2097	
Big Lime	2097			*	2291	
Big Injun	2291			*	2334	
Sandstone & Shale	2334			*	2701	
Berea sandstone	2701			*	2714	
Shale	2714			*	2947	
Gordon	2947			*	2995	
Undiff Devonian Shale	2995			*	5899	5902
Rhinestreet	5899	5902	2	~	6206	6250
Cashaqua	6206	6250)	~	6316	6411
Middlesex	6316	641:	l	~	6329	6435
West River	6329	643	5	~	6404	6570
Geneseo	6404	6570)	~	6428	6622
Tully limestone	6428	6622	2	~	6454	6692
Hamilton	6454	669	2_	~	6474	6756
Marcellus	6474	6750	ر 5	~	6572	12421
TD	6572	1242	1			

^{*} From Pilot Hole Log

[~] From MWD Gamma Log

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	March 20, 2012
API#:	47-103-02613

REVISED FOR COMPLETION

Farm name:	Nice,	John E., eta	al	Operator Well	No.: Talki	ngton-Nice #	#2H
LOCATION: E	Elevation:	1,300		Quadrangle: _	New	Martinsville	
Latitu	de: 12,790	MagnoliaFeet South o	f 39 Deg. f 80 Deg.	County: 42 Min. 50 Min.	Sec		
Compa	ny: STONE	ENERGY COF	RPORATION	Casing &	Used in	Left in well	Cement fill
Addres	s: 6000 Har	npton Center,	Suite B	Tubing &	drilling	Left III well	up Cu. Ft.
	 	wn, WV 2650	5	20"	45'	45'	Grouted to Surface
Agent:	Tim McG	regor		13-3/8"	1,177'	1,177	1,062 - CTS
Inspect	or: Derek Ha	ught		9-5/8"	2,526'	2,526	1,080 - CTS
Date Pe	ermit Issued:	12/17/	2010	5-1/2"		11,678'	2,683
Date W	ell Work Comr	nonocu.	2/20/2011	2-3/8"		7,124'	
Date W	ell Work Comp	oleted: 1	0/25/2011				
Verbal	Plugging:					-	
	rmission grante						ļ
Rotar	√ Cable	Rig					<u> </u>
Total	Vertical Depth	(**/-	6,569				
Total	Measured Dept	h (ft):	1,678				
Fresh	Water Depth (f	t.):	46				
Salt W	/ater Depth (ft.)): 1	710				
Is coal	being mined in	area (N/Y)?	No				
Coal D	epths (ft.):	1,022	! 				
Void(s)	encountered (1	N/Y) Depth(s)	None				
Producing Gas: Initia Final of Time of Static rock Second pr	g formational open flow2 upen flow1.00 of open flow beta k Pressure1.80 or oducing format	MARCELLU 270 MCF/d Oi 30 MCF/d ween initial and 390 psig (surfa	Pay 2 I: Initial open flow Final open flow final tests ace pressure) af Pay zo	zone depth (ft)_low0Bl v0Bb 18Hours rter1_Hour ne depth (ft)	7,158' MD to 11,6 ol/d l/d	ata on separate s 589' MD	sheet)
	al open flow open flow		l: Initial open fl Final open flov				
Time o	of open flow bet	ween initial and	final tests	Hours			
Statia roa	b Pressure	neia (eurf	ce pressure) af	terHou	rs		

all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

3/19/2012 Date

Were core samples taken? YesNoX	Were cuttings caught during drilling? Yes X No
Were Electrical, Mechanical or Geophysical logs recorded on thi and CBL.	s well? If yes, please list_MWD Gamma, Mud Log,
FRACTURING OR STIMULATING, PHYSICAL CHANG DETAILED GEOLOGICAL RECORD OF THE TOPS COAL ENCOUNTERED BY THE WELLBORE FROM SU	WING: 1). DETAILS OF PERFORATED INTERVALS, EE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC AND BOTTOMS OF ALL FORMATIONS, INCLUDING URFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating: Perforated 13 individual intervals from 11,589' MD to 7,158'	MD Performed 13 individual stages of slick water
stimulations. Total volumes pumped were 573,420 lbs. 80/	
4,649,128 gals. Fresh Water (99.1008%), 61 gals. Corrosio	
1,063 gals. Bio-Cide (0.0229%), 3,711 gals. Friction Reduce	
3,050 gals. Surfactant (0.0656%), 836 lbs. Breaker (0.0022	
Stabilizer (0.0213%), 28,461 gals 15% HCI (0.6122%), and	
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top De Surface:	pth / Bottom Depth
	and the single-paths
See attached sheet for the formations encountered a	and their depths.

Talkington-Nice #2H API 47-103-02613 Stone Energy Corporation

Horizontal

	Тор	Тор	(ft		Bottom (ft	Bottom (ft
	(ft TVD)	MD)	1		TVD)	MD)
Sandstone & Shale	Surface			*	1022	
Pittsburgh Coal	1022			*	1027	
Sandstone & Shale	1027			*	1992	
Little Lime	1992			*	2034	
Sandstone & Shale	2034			*	2097	
Big Lime	2097			*	2291	
Big Injun	2291			*	2334	
Sandstone & Shale	2334			*	2701	
Berea sandstone	2701			*	2714	
Shale	2714			*	2947	
Gordon	2947			*	2995	
Undiff Devonian Shale	2995			*	5899	5907
Rhinestreet	5899	590	7	~	6193	6244
Cashaqua	6193	624	4	~	6323	6464
Middlesex	6323	6464	4	~	6337	6494
West River	6337	6494	4	~	6411	6670
Geneseo	6411	6670	כ	~	6433	6730
Tully limestone	6433	6730	כ	~	6461	6820
Hamilton	6461	6820)	~	6483	6906
Marcellus	6483	690	5	~	6569	11679
TD	6569	1167	9			

^{*} From Pilot Hole Log

[~] From MWD Gamma Log

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

that the information is true, accurate, and complete.

DATE:	March 19, 2012
API #:	47-103-02614

REVISED FOR COMPLETION

Farm name: Nice, John E., etal	Operator Well	No.: Talkir	ngton-Nice#	3H
LOCATION: Elevation: 1,300'	Quadrangle: _	New	Martinsville	
District: Magnolia Latitude: 12,770 Feet South of 39 Deg. Longitude 1,060 Feet West of 80 Deg.	County:	30Sec		
Company: STONE ENERGY CORPORATION			T	T
Address: 6000 Hampton Center, Suite B	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Morgantown, WV 26505	20"	49'	49'	Grouted to Surface
Agent: Tim McGregor	13-3/8"	1,155'	1,155	922 - CTS
Inspector: Derek Haught	9-5/8"	2,541'	2,541'	1,215 - CTS
Date Permit Issued: 12/17/2010	5-1/2"		10,904'	2,474
Date Well Work Commenced: 03/04/2011	2-3/8"		7,007'	
Date Well Work Completed: 10/22/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 6,480				
Total Measured Depth (ft): 10,916				
Fresh Water Depth (ft.): 60				
Salt Water Depth (ft.): 1,715				
Is coal being mined in area (N/Y)?				
Coal Depths (ft.): 1,022				
Void(s) encountered (N/Y) Depth(s) None				
OPEN FLOW DATA (If more than two producing formation Producing formation MARCELLUS Pay: Gas: Initial open flow 380 MCF/d Oil: Initial open flow Time of open flow between initial and final tests Static rock Pressure 1,890 psig (surface pressure) af	zone depth (ft)_ low0Bb v0Bb 225Hours	6,991' MD to 10,8 bl/d l/d	907' MD	PECEIVED
Gas: Initial open flowMCF/d Oil: Initial open fl		ol/d		MAR 2 0 2012
Final open flow MCF/d Final open flow			W	/ Department of
Time of open flow between initial and final tests			EUNIO	V Deparament of Inmental Protection
I certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those indi-	and am familiar		nation submitte	d on this document and

Were core samples taken? YesNoX Were cuttings caught during drilling? YesX No
Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list MWD Gamma, Mud Log, and CBL.
NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:
Perforated 12 individual intervals from 10,807' MD to 6,991' MD. Performed 12 individual stages of slick water
stimulations. Total volumes pumped were 521,280 lbs. 80/100 Mesh sand, 4,013,640 lbs. 40/70 Mesh sand,
4,326,489 gals. Fresh Water (99.0735%), 55 gals. Corrosion Inhibitor (0.0013%), 153 lbs. Iron Stabilizer (0.0004%),
916 gals. Bio-Cide (0.0212%), 3,278 gals. Friction Reducer (0.0758%), 324 gals. Scale Inhibitor (0.0075%),
3,042 gals. Surfactant (0.0703%), 691 lbs. Breaker (0.0019%), 12,246 lbs. Polymer Gel (0.0340%), 863 gals. Clay
Stabilizer (0.0199%), 26,018 gals 15% HCl (0.6014%), and 4,016 gals. 28% HCl (0.0928%).
Plug Back Details Including Plug Type and Depth(s):
Formations Encountered: Top Depth / Bottom Depth Surface:
See attached sheet for the formations encountered and their depths.

Talkington-Nice #3H API 47-103-02614

Stone Energy Corporation Horizontal

Honzontai					
	Top	Тор	(ft	Bottom (ft	Bottom (ft
	(ft TVD)	MD)		TVD)	MD)
Sandstone & Shale	Surface		*	1022	
Pittsburgh Coal	1022		*	1027	
Sandstone & Shale	1027		*	1992	
Little Lime	1992		*	2034	
Sandstone & Shale	2034		*	2097	
Big Lime	2097		*	2291	
Big Injun	2291		*	2334	
Sandstone & Shale	2334		*	2701	
Berea sandstone	2701		*	2714	
Shale	2714		*	2947	
Gordon	2947		*	2995	
Undiff Devonian Shale	2995		*	5892	5910
Rhinestreet	5892	5910	~	6185	6250
Cashaqua	6185	6250	~	6312	6438
Middlesex	6312	6438	~	6326	6462
West River	6326	6462	~ .	6397	6606
Geneseo	6397	6606	~	6419	6662
Tully limestone	6419	6662	~	6444	6734
Hamilton	6444	6734	. ~	6464	6802
Marcellus	6464	6802	~	6480	10916
TD	6480	10916	5		

^{*} From Pilot Hole Log

PECEIVED
Office of Oil & Gas

MAR 2 0 2012

WV Department of Environmental Protection

[~] From MWD Gamma Log

that the information is true, accurate, and complete.

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE: ___

3/19/2012

March 19, 2012 47-103-02651

REVISED FOR COMPLETION

Farm name: Nice, John E., etal	Operator Well	No.: Talkir	ngton-Nice#	4H
LOCATION: Elevation: 1,300'	_ Quadrangle: _	New	Martinsville	.
District: Magnolia Latitude: 12,800 Feet South of 39 Deg. Longitude 1,120 Feet West of 80 Deg		30Sec		
Company: STONE ENERGY CORPORATION				
Address: 6000 Hampton Center, Suite B	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Morgantown, WV 26505	20"	45'	45'	Grouted to Surface
Agent: Tim McGregor	13-3/8"	1,167'	1,167'	1,107 - CTS
Inspector: Derek Haught	9-5/8"	2,536'	2,536'	1,080 - CTS
Date Permit Issued: 04/19/2011	5-1/2"		10,584'	2,378
Date I climic abbeta.	2-3/8"		6,876'	
Date Well Work Commenced.	1 2 0/0		5,5.5	
Date well work Completed.				
Verbal Plugging:		 	<u> </u>	
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 6,482				
Total Measured Depth (ft): 10,590			_	
Fresh Water Depth (ft.): 60				<u> </u>
Salt Water Depth (ft.): 1,705				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 1,022				
Void(s) encountered (N/Y) Depth(s) None				
OPEN FLOW DATA (If more than two producing formation MARCELLUS Pay Gas: Initial open flow 560 MCF/d Oil: Initial open Final open flow 3,040 MCF/d Final open flo Time of open flow between initial and final tests	zone depth (ft)_flowBl	6,915' MD to 10,5 bl/d bl/d	ata on separate s 516' MD	heet)
Static rock Pressure 2.480 psig (surface pressure) a	11041.0		Office Office	
Second producing formation Pay ze	one depth (ft)		• mee	of Old Bas
Gas: Initial open flow MCF/d Oil: Initial open	flowBl	bl/d	MΑ	IR 2 0 2012
Final open flow MCF/d Final open flo				
Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) a		rs	WV Do Environma	Programment and
I certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those ind	l and am familiar ividuals immedia	with the infor	manon saomine	a on and accument and

Were core samples taken? YesNoX	Were cuttings caught during drilling? Yes X No
Were Electrical, Mechanical or Geophysical logs recorded on the and CBL.	nis well? If yes, please list_MWD Gamma, Mud Log,
FRACTURING OR STIMULATING, PHYSICAL CHAN	OWING: 1). DETAILS OF PERFORATED INTERVALS, GE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC S AND BOTTOMS OF ALL FORMATIONS, INCLUDING SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:	
Perforated 11 individual intervals from 10,516' MD to 6,915	
stimulations. Total volumes pumped were 493,840 lbs. 80	
4,071,736 gals. Fresh Water (99.1282%), 56 gals. Corrosi	
	er (0.0696%), 308 gals. Scale Inhibitor (0.0076%), 2819 gals
Surfactant (0.0692%), 715 lbs. Breaker (0.0021%), 13,262	
(0.0223%), 15 gals. Antifoam (0.0004%), 23,981 gals 15%	HCI (0.5890%), and 1,976 gals. 28% HCI (0.0485%).
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top D Surface:	Pepth / Bottom Depth
See attached sheet for the formations encountered	and their depths.

Talkington-Nice #4H API 47-103-02651 Stone Energy Corporation Horizontal

	Тор	Тор	(ft	Bottom (ft	Bottom (ft
	(ft TVD)	MD)		TVD)	MD)
Sandstone & Shale	Surface		*	1022	
Pittsburgh Coal	1022		*	1027	
Sandstone & Shale	1027		*	1992	
Little Lime	1992		*	2034	
Sandstone & Shale	2034		*	2097	
Big Lime	2097		*	2291	
Big Injun	2291		*	2334	
Sandstone & Shale	2334		*	2701	
Berea sandstone	2701		*	2714	
Shale	2714		*	2947	
Gordon	2947		*	2995	
Undiff Devonian Shale	2995		*	5881	5916
Rhinestreet	5881	5916	~	6207	6309
Cashaqua	6207	6309	~	6308	6460
Middlesex	6308	6460	~	6328	6494
West River	6328	6494	~	6400	6628
Geneseo	6400	6628	~	6422	6674
Tully limestone	6422	6674	~	6446	6730
Hamilton	6446	6730) ~	6465	6780
Marcellus	6465	6780	~	6482	10590
TD	6482	1059	0		

^{*} From Pilot Hole Log

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[~] From MWD Gamma Log